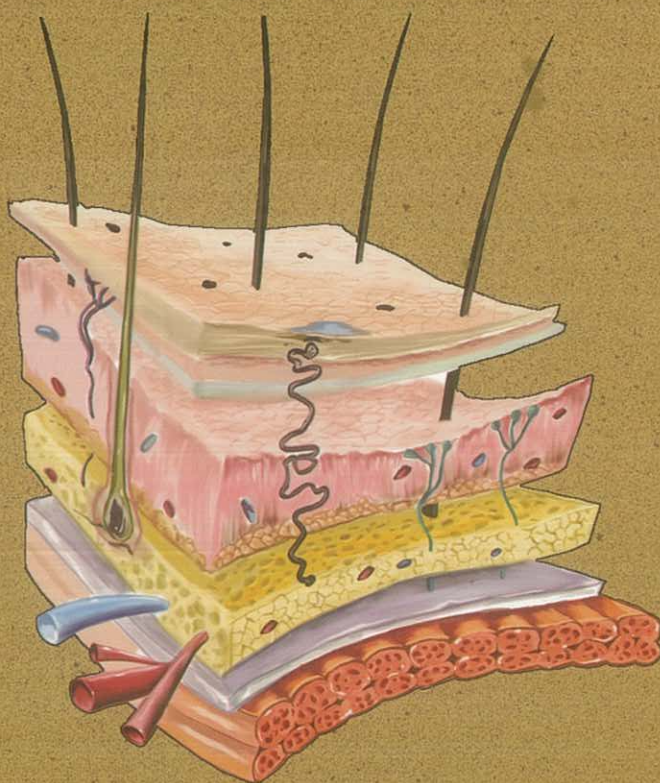


DERMATOLOGY MADE EASY

SUPPORTED BY
VIDEO LESSONS ON CD



THIRD EDITION

MAHMOUD SEWILAM

KASR AL-AINY SCHOOL OF MEDICINE
CAIRO UNIVERSITY

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Dermatology Made Easy

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By:

Mahmoud Sewilam

Kasr Al-Ainy School of Medicine

Cairo University

Second Edition

All thanks to Allah and special thanks for all those people who are always encouraging me to do more than my best and who have never stopped believing in me,

Thanks for:

- ♥ **My father**, the wise
- ♥ **My mother**, the teacher of my life
- ♥ **My brothers**;

Ahmed thanks for giving me power.

Mohammed thanks for all your advices to me & for the attracting design.

- ♥ **My little beautiful sister, Reman**: you taught me how to live the life of happiness.
- ♥ **My friends**, I love you all, and special thanks for **Mohamed Hassan**, without your effort this book would have never seen the light.
- ♥ **For my students**: you should always do more than your best, be yourself, be the change that you want, don't let anyone break you, you are the future, make it always full of whatever you want.

- ♥ **For her!**

I did not meet you yet, but I would like to tell you that I love so much!
You are the only one, who deserves my feelings, time, effort and everything I have, that's for you!
Finally I dedicate you my success.



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➤ INTRODUCTION TO DERMATOLOGY :

❖ The Skin :

- The skin is the **LARGEST** organ of the body , it weighs **1/7** of body with surface are of **1.75 m²**
- **Examination of the skin** is always a part of the clinical examination of the body e.g. pallor and cyanosis are related to color of the skin
- Some skin diseases may have **associated** internal organ involvement, e.g. psoriasis may be associated with arthritis
- **Cutaneous findings** can be clue to internal diseases

❖ Management of the skin :

1. Note the chief **complaint**
2. Obtain **history** of the present illness, past, present medications (*skin and non -skin related*), and allergy to any medications, if present.
3. **Examine** the patient's skin, hair, nails, and mucous membranes, mainly the oral mucosa in good light.
4. Sometimes, **investigations** are needed to confirm or rule out a particular diagnosis e.g. biopsy and fungal scraping.
5. **Treatment** can be local and / or systemic.

❖ Knowledge of normal structure of skin is important because

- Change in this structure will manifest as clinical symptoms and signs
- Any skin diseases has both a visual diagnosis and a structure alteration

Examples :

1. Absent hair follicle manifest as **alopecia**
2. Absent melanocytes manifest as **vitiligo**

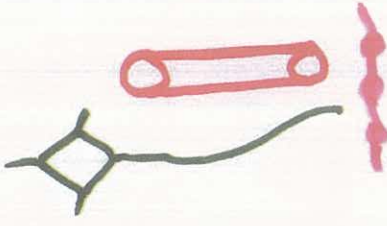
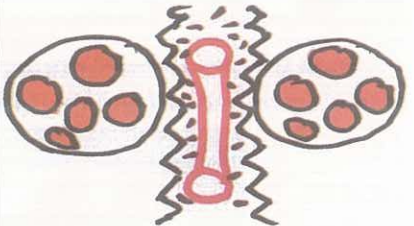
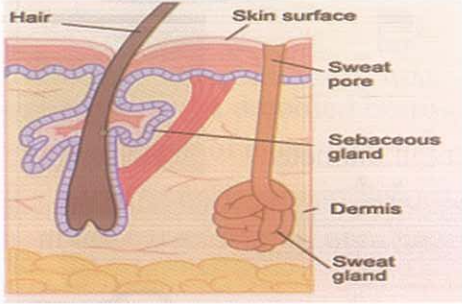


❖ Function of the skin : (DSS ITP)

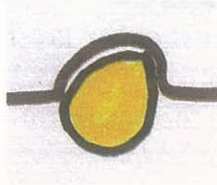
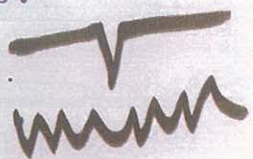


1. Vitamin **D** formation from precursor under the effect of sunlight
2. **S**ensory function , temperature , pain , pressure , touch .
3. **S**weat excretion
4. **I**mmunological function via Langerhans cells
5. **T**emperature control through vasodilatation , vasoconstriction and vaporization of sweat from the skin surface.
6. **P**rotection against physical injury , thermal injury , invading micro-organisms and UVR
7. **P**revention of water & electrolyte loss

❖ **Structure Of Skin:** *Skin is composed of 3 main layers :*

A-Epidermis	B- Dermis	C- Hypodermis (subcutaneous Fat)
		
- It is the most outer layer of the skin. - It rests on the basement membrane	It is present below the basement membrane ,	It is the lowest layer of the skin.
☞ It is formed of cells : Keratinocytes : - for formation of <u>Keratin</u>, the covering <u>Protein</u> layer of the skin ❖ KCs are arranged as : Keratinous (horny) cell layer ; upper most component ; composed of dead cell (with no nuclei Granular cell layer; cells contain keratohyaline granules. Squamous (prickle) cell layer above the basal cell layer. Basal cell layer ; lower most layer , for formation of KCs. Melanocytes : for formation of melanin , skin color contributor . Langerhans cells (LCs) : for immune function of the skin	☞ It is composed of: - Collagen, Elastic fibers and Matrix of glycosaminoglycans ☞ It contains: Blood vessels ; arterioles , capillaries and venules Nerve fibers Lymphatics	☞ It is composed of: lobules of Fat cells , separated by Fibrous septa composed of collagen and large blood vessels
	❖ Skin Appendages  Nails : contain <u>keratin</u> Hair follicles : also contain <u>keratin</u> Sebaceous glands : discharge their sebum content into hair follicles. Together with hair , they form <i>the pilosebaceous units</i> Sweat glands : أبو الفلشر ... وإكس الجسم open on the surface of the epidermis through sweat ducts (eccrine sweat glands all over the body surface & apocrine sweat glands at body flexures only).	

❖ Cutaneous Signs :

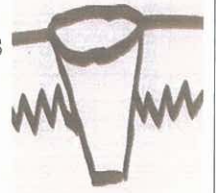
1- Primary Lesions	2) Secondary lesions
These are the initial lesions of skin diseases (first to appear)	These occur as a result of modification of primary lesions
1. Papule : باب الصدف والحز a circumscribed solid elevation of skin Less than 0.5 cm in diameter e.g. Psoriasis and lichen planus  2. Nodule : a circumscribed solid elevation of skin More than 0.5 cm in diameter . It is Deep lesion that represents a Dermal or subcutaneous pathology e.g. lepromatous leprosy 	A. Pustule : a small elevation of skin containing purulent material . It may originate as a pustule or may develop from a papule or vesicle (1ry or 2ry) 
3. Plaque : an area of <u>change of texture</u> or consistency of the skin. It may be <u>elevated</u> or <u>depressed</u> under the surface of the skin. An elevated lesion may originated <i>de novo</i> or as a result of <i>confluence of multiple papules</i>. It occupies a large surface area in comparison with its height in contrast to the <i>nodule</i>.  	B. Scale : Dry or greasy laminated masses of keratin.   C. Crust : dried material on the skin as serum , pus , or blood . 
4. Vesicle : صفقونة an elevation of skin containing fluid less than 0.5 cm in diameter  5. Bulla : بقرش كبيرة an elevation of the skin containing fluid more than 0.5 cm in diameter . A cyst differs from vesicle or bulla by having a wall. 	D. Erosion : a partial or total loss of the Epidermis , not reaching not involving the dermis so heal without scar.  E. Excoriation & abrasions : superficial discontinuation of the skin; only Epidermal . 
6. Macule : a circumscribed area of skin discoloration less than 1 cm in diameter . It could be hypopigmented , hyperpigmented or erythematous , e.g. Brown macule in Pityriasis versicolor & White macule in Vitiligo. A macule more than 1 cm in diameter is called Patch 	Excoriations are caused by scratching with fingernails ,  while Abrasions are due to mechanical trauma or constant friction. 

7. **Wheal** : the primary lesion of urticaria.
Evanescent (transient) Edematous
Elevations of the skin of variable sized.
Itching is usually present



- F. **Ulcer** : a rounded or irregularly shaped excavations that result from **total** loss of the **epidermis plus** some portion of the **dermis**.

- Shape , size , and depth are variable depending on disease process



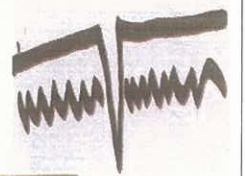
Comedo : the primary lesion of **acne**.
 There are two types ;

- A. **Closed comedo or White head** which is **yellowish papule**.
 B. **open comedo or black head** which is a flat or slightly elevated papule with dilated central opening filled with **blackened keratin** and

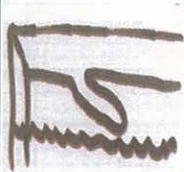


- C. **Fissure (crack)** :

a linear cleft through the epidermis **extending into** the dermis



8. **Burrow** : the primary lesion of **scabies**.
 A linear elevation of epidermis tunneled by female *sarcoptes scabiei* mite



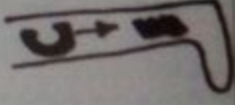
- D. **Furrow** : A derroofed burrow caused by scratching of a burrow



❖ SKIN INFECTIONS:

1. Bacterial Infections
2. Viral Infections
3. Fungal Infections
4. Parasitic Infections
5. Leprosy

I- BACTERIAL INFECTIONS:

	A) Impetigo Contagiosum	B) Folliculitis = impetigo of Bockhart	C) Sycosis barbae	D) Furuncle = Boil	E) Carbuncle
Def	Superficial infection of the Skin	Infection in Upper part of hair follicle	Folliculitis of the beard area	Deep infection in Lower part of hair follicle with central necrosis	Multiple deep boils that open on the surface by multiple fistulae
Cause	Cocci-type bacteria ; Streptococci and staphylococci . Infection could be primary predisposed to by poor hygiene and moisture , or secondary due to insect bites , scabies or pediculosis capitis infestation دودة الرأس 	staphylococcus aureus PDF : moisture and poor hygiene	staphylococcus aureus PDF : moisture , poor hygiene and shaving	staphylococcus aureus PDF : obesity and Diabetes Mellitus	staphylococcus aureus PDF : Diabetes Mellitus 
Types	1. Ordinary impetigo ; the disease begins with 2 mm erythematous macules which shortly develop in Vesicles . These rupture with seropurulent discharge which dries to form Loosely stratified Golden yellow Crusts . It occurs on scalp as a complication of pediculosis capitis. , face , hands , genitalia. There are NO constitutional symptoms and it resolves within a few days 	follicular pustules 	follicular pustules and papules in the beard area نقبات التوعية 	follicular red papules حب الثور 	It occurs on the back , neck , intertriginous areas TTT : by - Incision and drainage - Systemic antibiotics.
2. Bullous Impetigo ; it is caused by Staphylococci . Primary lesion is a bullae . It characteristically occurs in newborn infants, though it may occur in any age. It accompanied by constitutional symptoms and might be fatal in newborn infants (Staphylococcal Scalded Skin Syndrome) 3. CirCinate impetigo ; It occurs as an extension of ordinary impetigo or secondary to rupture of bullous impetigo 4. Ulcerative impetigo (ECTHYMA) ; it occurs on legs lesion have thick Crusts and heal with scar 	• Complications of Impetigo Contagiosum: ; 1. Spread of infection to other sites & children . 2. Post streptococcal glomerulonephritis in 2-5 % of cases affected by nephrogenic strains • Treatment of ALL: 1. Treatment of predisposing factors 2. Topical antiseptics as Povidone iodine or Potassium Permanganate 1/ 8000 - 1/10,000 3. Topical antibiotics as fusidic acid , gentamycin or bacitracin 4. Systemic antibiotic given if infection generalized , associated with fever or lymphadenopathy and in cases of bullous impetigo or ecthyma				

	F) Erythrasma	G) Erysipelas	H) Cellulitis
			
Def.:	Superficial infection of <u>intertriginous</u> areas	<u>Suppurative inflammation of UPPER</u> dermis	<u>Suppurative inflammation of lower dermis & SC tissue</u>
Cause	Corynebacterium minutissimum	<u>Beta</u> – hemolytic streptococci.	Staphylococcus aureus & Streptococcus pyogenes
PDF:	DM. , Obesity, Debilitating Diseases	Lymphedema	
CL/P & Comp.	Dry Scaly reddish brown patches with fine Scales in intertriginous areas; axillae, groins, submammary areas. • Wood's light shows coral red fluorescence due to porphyrin Dr3 <i>fine scales</i> minutissimum	Swollen, Sharp border. Constitutional symptoms include malaise and fever, chills. <u>Tender</u> , <u>Erythematous</u> , In Extensive cases blisters may be formed. <u>Lymphedema</u> occurs from recurrent episodes	Swollen, ill-defined border. Constitutional symptoms include malaise and fever, chills. <u>Tender</u> , <u>Erythematous</u> .
TTT	<u>1- Topical therapy</u> Antibiotics as <u>Fusidic acid</u> <u>AntiFungals</u> as azole derivatives (although it's a diphtheroid bacteria) <u>2- Systemic therapy :</u> as erythromycin or tetracycline ○○○○○○	• <u>Systemic antibiotics</u> as penicillin or erythromycin • <u>For resistant cases</u> , confirm that organism is streptococcus. <u>Dicloxacillin, Rifampicin., Benzathine – penicillin or Erythromycin</u> is given for several months.	- Aggressive Antibiotic Therapy

II – VIRAL INFECTION :

1. Herpes Simplex (HS) caused by herpes simplex virus (HSV).
2. Herpes Zoster (HZ) caused by varicella zoster virus (VZV).
3. Warts (Verrucae) caused by human papilloma virus (HPV).
4. Molluscum contagiosum caused by Pox virus.

	A) Herpes Simplex (HS)	B) Herpes Zoster (HZ)
Cause	• It is the most common viral infection. It is caused by herpes simplex virus (HSV), • DNA virus of two types ; - HSV type I which leads to herpes labialis and other non – genital infections and, - HSV type II which leads to herpes progenitalis. • MOT: - Skin to skin - Skin to mucous membrane contact	• It caused by varicella zoster virus (VZV)
IP	2-5 days	7-10 days
Pathogenesis	➤ HSV TYPE I : - Primary infection : It occurs in patient who is infected for the first time. - It causes primary herpetic gingivostomatitis - Infection is usually subclinical and passes unnoticed in about 90 % of cases - It is characterized by small superficial vesicles on the oropharynx that rupture quickly leaving painful denuded areas . - These are accompanied by fever , swollen gums , lymphadenopathy , sore throat , malaise , loss of appetite and Lesion heal within 2 weeks - Recurrent attacks : Following resolution of primary infection, virus is <u>not eliminated</u> from the body; HSV has a special predilection for neural tissue. It migrates to dorsal root ganglia and remains dormant. If <u>reactivated</u> , viral particles migrate along peripheral nerves to the skin and mucous membranes causing <u>recurrent HS</u> at or near the primary site.	❖ CHICKEN POX (VARICELLA) :  It occurs in patient who is exposed to the virus for the first time. It is a relatively mild childhood disease with <u>generalized</u> but self-limiting vesicular eruption that leads to the formation of brownish crust. Lesions heal within 10 days. After the attack , virus resides in posterior root ganglia 

❖ PDF for reactivation :

- Fatigue , Fever , Trauma
- UVR , stress ,
- Menstruation , GIT disturbances تحت
- Altered **immune** status or **immunosuppressives**



❖ Sites of Recurrent attacks :

- **Lips (Herpes Labialis)** : usually **bilateral (may be unilateral)** grouped **vesicles** on erythematous base on the lips usually preceded or associated with burning or tingling sensation. Within a few days , vesicles dry up forming **crusts** and fall off . Lesions heal **without a scar**

- **Face : (herpes facialis)** : around other orifices as eyes, nose, cheeks& ears

Special variants of HSV type I :

- **Ocular mucosa :**

It needs prompt ophthalmologic consultation
→ corneal opacity



- **Finger or hand (herpetic whitlow)** : it occurs on the finger as a result of direct inoculation of HSV into abraded skin . it is very painful with vesicles, edema and redness



➤ **HSV TYPE II (HERPES PROGENITALIS) :**

❖ Primary infection :

It is transmitted by sexual contact
It involves genitalia of both males and females

It is characterized by painful grouped superficial vesicles on an erythematous base followed by erosion or genital ulceration

Herpes progenitails in a pregnant woman at the time of delivery is a strong indication for **caesarian section** as neonatal infection is serious

- ❖ **Recurrent attacks** : less severe than the primary infection



❖ PDF for reactivation :

- Fever ,Trauma
- Decreased resistance , Drugs (corticosteroids and immunosuppressive agents) ,
- Diseases of the spine (TB and metastatic deposits) and malignant Diseases (lymphoma and Hodgkin's disease)



❖ CL/P :

Reactivation of infection : Herpes Zoster

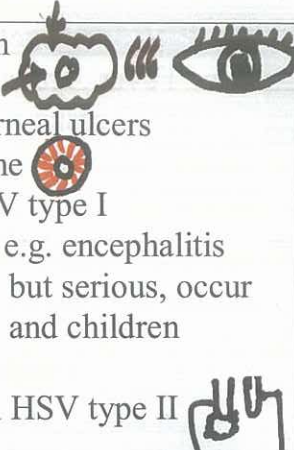
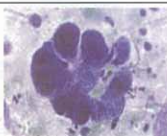
- Onset is accompanied or preceded one week before by pain
- **Strictly Unilateral** (not crossing midline, linear, along a dermatome) groups of **vesicles** on erythematous and edematous base , along the distribution of one or more sensory nerves , **local LNs** may be enlarged
- Vesicles usually dry up **without rupture** and recovery occurs after 2-4 weeks. It may leave **scars**.

- Lesions may be :

- **Hemorrhagic** in which vesicles contain blood,
- **Gangrenous or Generalized** in immunocompromized patients.
- **Abortive type** of HZ presents with only pain and some redness without vesicular eruption

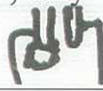
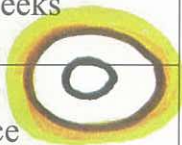
- Disease is not recurrent; one attack gives **Permanent solid immunity**



C o m p l i c a t i o n s	1. <u>Secondary</u> infection 2. <u>Eye</u> complications e.g. keratitis and corneal ulcers 3. <u>Erythema multiforme</u> due to recurrent HSV type I 4. <u>CNS</u> complications e.g. encephalitis and meningitis; rare but serious, occur especially in infants and children 5. <u>Cancer cervix</u> due to recurrent cervical HSV type II 	1. <u>Secondary</u> infection 2. <u>Eye</u> complications; HZ ophthalmicus 3. <u>CNS</u> complications; <u>post-herpetic neuralgia</u> where pain persists for several months after healing of lesions. It occurs in 10-20% of the patients, especially in <u>elderly</u> patients or due to <u>delay</u> in starting antiviral therapy 4. <u>Cicatricial Alopecia</u>. 
D i a g n o s i s	1. Clinical picture 2. Tznak smear using Giemsa stain 3. Viral culture 4. Serological tests; HSV antibody titers against Type I and II 5. PCR 	NB : ❖ HZ may be a manifestation of internal malignancy if : ○ Very old age ○ Gangrenous type ○ Bilateral affection ○ Recurrent 
T T T	1. Avoid precipitating factors if possible to prevent recurrence 2. Avoid direct sexual contact during the attack in genital herpes 3. TOPICAL THERAPY : a. <u>Drying antiseptic lotions</u>; • 10 % Aluminum Acetate. • Potassium Permanganate 1/8000 – 1/10,000 or • They are given in <i>early vesicular stage</i> b. <u>Antiviral; 545</u> • Acyclovir cream applied 5 times daily (every 4 hours) for 5 days, • Effective when given in the course of the diseases (better in <i>prodromal stage</i>). • It reduces <i>period</i> of the attack and <i>duration</i> of viral shedding c. <u>Idoxuridine (IDU)</u> given for Eye lesions 4. SYSTEMIC THERAPY (ANTIVIRALS) : 545 - Acyclovir, 200 mg 5 times daily (every 4 hours) for 5 days is administrated in : • Severe episodes or for immunocompromized patients. • It should be given early, within 48-72 hours from the appearance of the eruption.	I. TOPICAL THERAPY : in vesicular stage : <u>a. Drying antiseptic lotions</u> <u>b. Antivirals</u>; acyclovir cream in very early stage 5 times daily may minimize the duration of the attack II. SYSTEMIC THERAPY : <u>A. Antivirals :</u> 1- <u>Acyclovir</u>, 800mg tablets 5 times daily (every 4 hours) for 7 days 2- <u>Valacyclovir</u>, 1000 mg 3 times daily for 7 days 3- <u>Famcyclovir</u>, 500 mg 3 times daily for 7 days <u>B. Analgesics , Carbamazepine And Gabapentin For Pain</u>

The Most Important Points In Herpes Simplex And Herpes Zoster :

	Herpes simplex	Herpes zoster
Cause	HSV-I → orofacial HSV- II → genital herpes	Varicella – zoster virus
Recurrence	+ ve	-ve , one attack gives solid immunity
Primary lesion	Bilateral grouped vesicles on erythematous base	Unilateral grouped vesicles on erythematous base
Site	Periorificial	Along distribution of nerve
Distribution	Unilateral or bilateral	Strictly unilateral (not crossing midline, linear , along a dermatome)
IP	2 – 5 days with tingling, burning or itching which precede or accompany eruption	7 – 10 days; pain precedes or accompanies the eruption & severity increases with age or delay treatment
Lymphadenopathy	-ve or +ve	+ve
Complications	- Secondary infection - Eye complications E.g. Keratitis and corneal ulcers - Erythema multiforme - CNS complications e.g. Encephalitis and meningitis - Cancer cervix	- Secondary infection - Eye complications; hz ophthalmicus - CNS complications; Post-herpetic neuralgia - Cicatricial alopecia
Treatment	1. <u>Topical therapy</u> : Drying antiseptic lotions; Acyclovir cream IDU for eye lesions 2. <u>Systemic therapy</u> Antivirals Acyclovir, 200 mg 5 times daily (every 4 hours) for 5 days	1. <u>Topical therapy</u> : Drying antiseptic lotions; Acyclovir cream 2. <u>Systemic therapy</u> <u>A.Antivirals :</u> 1- <i>Acyclovir</i>, 800mg tablets 5 times daily (every 4 hours) for 7 days 2- <i>Valacyclovir</i> , 1000 mg 3 times daily for 7 days 3- <i>Famcyclovir</i> , 500 mg 3 times daily for 7 days <u>B.Analgesics ,</u> <u>Carbamazepine And</u> <u>Gabapentin For Pain</u>

	C) Warts = Verrucae	D) Molluscum Contagiosum السررررة
D E F	These are common , infectious , benign , epithelial growth caused by human papilloma virus (HPV) They involve both skin and mucous membrane	It is caused by pox virus
MOI	Direct or indirect contact	Direct and indirect contact
IP	1- 6 Months نفس عدد الأنواع	2- 6 Weeks
C P	❖ Types of warts : 1. Genital warts (Condyloma acuminata): involves skin of genitals in both sexes. • In mucous membrane , they are; MBCs Moist , Pinkish , Bleed easily with a Cauliflower appearance , foul-Smelling Soft outgrowth 2. Common warts (verruca vulgaris):  <i>asymptomatic skin colored & verrucous papules</i> 3. Plane warts (verruca plana):  <i>asymptomatic skin colored flat-topped papules. Occur more in children & shows Koebner's Phenomenon (isomorphic response)</i> (Plane warts, Psoriasis, Lichen Planus) 4. Planter warts (verruca plantaris): تيت involves sole of foot , THICK & growing Inwards , Tender.  5. Filiform warts (verruca filiformis): بطل Pedunculated skin growth, <i>Thin</i> , Long . 6. Digitiform warts (verruca digitata):  Papillomatous , <i>thin</i> Projections with finger-like Processes having a common stem Complications of HPV infection : oncogenicity; may predispose to cervical dysplasia or cancer cervix  Course of infection : Spontaneous involution may occur within 2 years Treatment of a few warts may induce regression of other warts	• Shiny , Smooth Surface  • Central umbilication squeezing the lesion → White Cheesy material can be expressed from the Central punctum . • Pearly white , dome shaped Papule . • It involves non-Genital or Genital skin; the later is considered a sexually transmitted diseases (STDs)  • Papule • Central umbilication

	C) Warts = Verrucae	D) Molluscum Contagiosum السريرة
T T T	❖ TTT OF WARTS = CCC PPP A 1. Electrocautery; cell destruction by heat effect under anesthesia 2. Chemical Cautery; cell destruction by caustics such as carbolic acid (phenol), glacial acetic acid, trichloroacetic acid 40 %, salicylic acid 40 % or lactic acid 40 % 3. Cryotherapy; cell destruction by freezing effect of liquid nitrogen 4. Laser treatment by pulsed dye laser or co2 laser 5. Podophyllin resin 25 % in alcohol, liquid paraffin or tincture benzoin co for treating <i>venereal warts</i>. It is painted twice weekly and should be washed after 6 – 8 hours. It is contraindicated in pregnant females and in large bleeding warts. • Recently, imiquimod cream may be used in the treatment of <i>venereal warts</i> by stimulating local interferon production 6. Resistant planter warts treated by Radiotherapy. 7. Autosuggestion; spontaneous disappearance of warts after placebo application • N.B.: NO STEROIDS ARE USED IN TREATMENT.	1. Electrocautery 2. Chemical cautery with phenol after removal with curette 3. Cryotherapy 4. Laser treatment.

III – FUNGAL INFECTIONS

Fungus is a kind of plant defective in chlorophyll. Fungal skin diseases are either **superficial** affecting skin only or **deep** affecting internal organs

Superficial fungal infections : These are among the most common dermatologic disorders :

Types :

I) Dermatophytes = ring worm = tinea

microspora , trichophyta , epidermophyta

Involve skin and skin appendages (hair and nails)

Mode of infection : direct contact or indirect contact from barbershops or patient's fomites

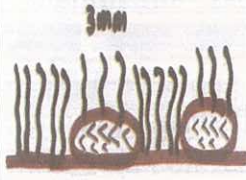
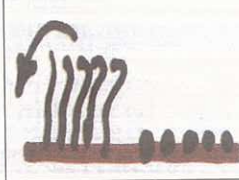
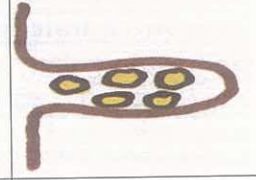
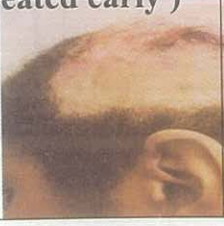
II) Yeasts :

Malassezia furfur , candida species

❖ Dermatophytes : = ring worm = tinea

➤ Clinical classification :

1- Tinea capitis : = ringworm of scalp :

	Scaly type	Black- dot type	Kerion کرش	Favus فـار
				
				
Cause (MSK)	<i>Trichophyta</i> Microspore	<i>Trichophyta</i>	<i>Trichophyta</i> Microspore	<i>Trichophyta</i>
Epidemiology	Children only	Children only	Children and adults	Children and adults
Clinical picture	Single or multiple bald patches on the Scalp, with fine grayish white Scales / loose hairs that break off → Stumps about 3 mm long that can be easily pulled out	Hairs break off at the surface of the skin giving picture of black dot	Boggy swelling studded with follicular pustules , pus is localized to hair follicles	Yellow cup-shaped sulfur crust (scutula) of mousy odor that form around loose hairs and lead to diffuse loss hair replaced by fibrous tissue
DD	Alopecia areata Psoriasis Seborrheic dermatitis		Abscess	
Course	No scar	No scar	Cicatricial alopecia (if not treated early) 	Cicatricial alopecia 

• **Diagnosis of Tinea capitis:**

1. Clinical examination
2. Wood's light : **microspore** gives **green fluorescence**
3. Direct **microscopic examination** using 15 % potassium hydroxide to identify hyphae and spores
4. Culture on Sabouraud's agar medium for *two weeks*

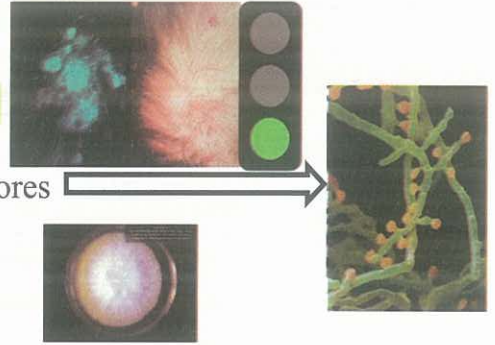
• **TTT of Tinea capitis :**

I- Topical therapy : USELESS IF USED ALONE

- a. Tincture iodine 1- 2 % , Tolnaftate cream, whitfield ointment , azole derivatives.
- b. Shampooing with selenium sulphide suspension or ketoconazole shampoo twice weekly renders the patient non- infectious early

II – Systemic therapy :

Griseofulvin, 12.5 mg/kg/day after meals, for 6- 8 weeks 2 divided doses.
(one tablet / 10 kg body weight with a maximum of 6 tablets)



❖ **OTHER TYPES :**

2. Tinea Circinata (Tinea corporis) = ringworm of hairless skin

3. Tinea Cruris =Ringworm Of Groin

4. Tinea Axillaris

5. Tinea Barbae = Ringworm Of Beard

6. Tinea Pedis = Athlete's Foot

7. Tinea Mannum

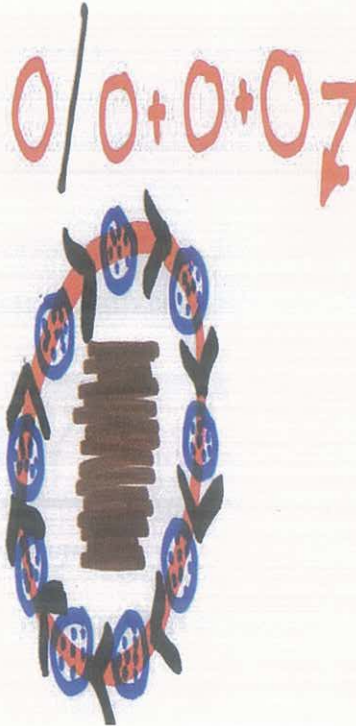
8. Tinea Unguium = Onychomycosis

2. Tinea Circinata (Tinea corporis) = ringworm of hairless skin

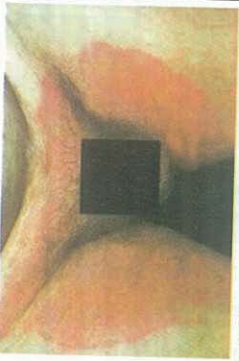
❖ Caused by trichophyta and microspora

❖ Clinical picture :

- Single or multiple
- Itching is a common symptom.
- Annular Active Patches Red ,
- Healing Center ! ... خد بالك
- Coalesce to form Polycyclic Patterns
- Well Defined
- Vesicular scaly Edge
- It occurs on exposed surfaces of the body as Face or arms
- DD : Herald patch of pityriasis rosea
- TTT :
 - For localized cases : topical antifungal twice daily
 - For extensive or resistant cases , **GAA**;



Griseofulvin for 3 weeks , Azole derivatives or Allylamines

Cause	Tinea Cruris = Ringworm Of Groin نهائيات الجسم	Tinea Axillaris	Tinea Barbae = Ringworm Of Beard	Tinea Pedis = Athlete's Foot نهائيات الجسم	Tinea Mannum	Tinea Unguium = Onychomycosis نهائيات الجسم
	Epidermophyta and Trichospora  PDF: Excessive sweating, obesity, friction, maceration, heat. it is a tinea circinata occurring in the crural area , it might extend into the gluteal folds and the buttocks. Scrotum Is NOT Involved due to antifungal effect of fatty secretions of sebaceous glands is common in most cases. حتى في الصورة متقطعي		Source of infection: farm animals or barber's instruments 	Epidermophyta and Trichophyta PDF: excessive sweating and excessive moisture of skin Source of infection: wet floor boards	Mannum: Man: palm, multiple, well-defined. num: unilaterally	Epidermophyta and Trichophyta 
CP		it is a tinea circinata occurring in the axillae	involvement is mostly one sided on the neck or face. Lesions are similar to tinea circinata or shows pustules like kerion 	Bilateral , Bad odor , Macerated , White , Recurrences are common. Sodden , Skin between toes, particularly the Fourth and Fifth in Feet . (narrowest interdigital space) 	occurs unilaterally on the palm as a well-defined area of multiple vesicles and deeply seated pustules with itchy sensation	yellowish or greenish coloration with thickening or brittleness leading to onycholysis . One or more nails of digits or toes may be involved, usually unilateral and asymmetrical if BiLaTeRaL .
DD	Candidiasis , flexural psoriasis, seborrheic dermatitis and erythrasma					
TTT				3. Avoid PDF 4. Topical therapy e.g. tincture iodine 1-2 % 5. Systemic therapy only in extensive cases		SYSTEMIC THERAPY: A. Terbinafine: 250 mg daily for 6 weeks for fingernails and 12 weeks for toe nails B. Itraconazole

• YEASTS :

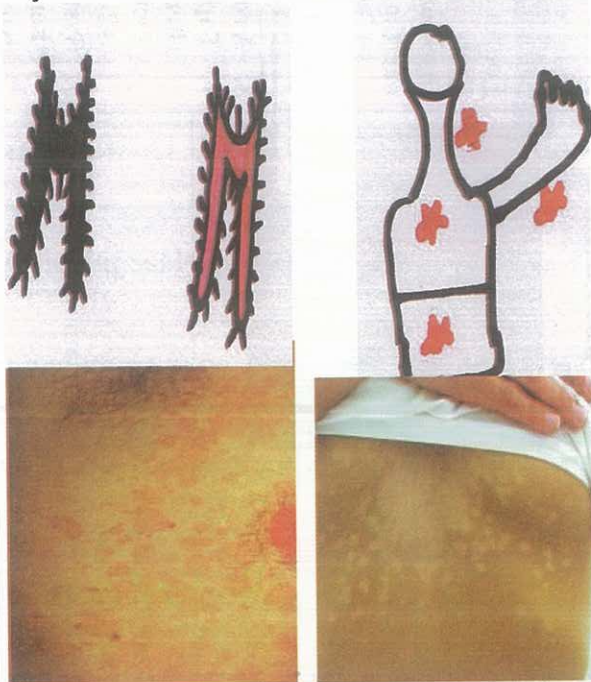


A) PITYRIASIS VERSICOLOR = Tinea Versicolor

It is very common superficial mycotic infection, more in tropical climates an summer time. It occurs in young adults with a familial predisposition. It is caused by

lipophilic yeast *Malassezia furur*
المتوحشة الشريفة

; the pathogenic (mycelial) form of ***pityrosporum orbiculare*** **الطبية** which is a normal commensal yeast of human hair follicles which under certain conditions, turns to the pathogenic mycelial form.



Usually starts on neck, upper parts of chest, back of arms. In extensive cases it spreads to abdomen and other parts of body.

C
P
Symptomless , but **itching** may be present
Recurrences are common in **Summer** due to **Heat and Humidity**
- Primary lesion :
Sharply demarcated MACULE , 
hyperpigmented or **hypopigmented**
covered by fine branny **Scaling**.

B) CANDIDIASIS = MONILIASIS

It is caused by **candida albicans** : a dimorphic organism; a yeast (Y) form **الطبية** (commensal; in mouth, gut and vagina) and a mycelial (M) form **الشريفة** (pathogenic)

PDF :

Under certain conditions organism is shifted from its commensal to its mycelial pathogenic form; *this shift is predisposed to by the following : (MST. DDD)*

- 1- **M**oisture and **S**weating
- 2- **T**rauma, e.g. friction from obesity
- 3- **D**rugs as corticosteroids , cytotoxics and antibiotics
- 4- **D**ebilitating diseases as malignancy or AIDS
- 5- conditions associated with **D**ecrease resistance, e.g. **anemia**, **pregnancy**, **cushing's syndrome**, **diabetes mellitus**.

Clinical Types Of Candidiasis

1-Mucosal candidiasis :

A. Whitish Pseudomembrane (Oral Thrush) :

in the mouth , occurs in infants and debilitated adults

B- Vulvo-Vaginitis (Thrush) :

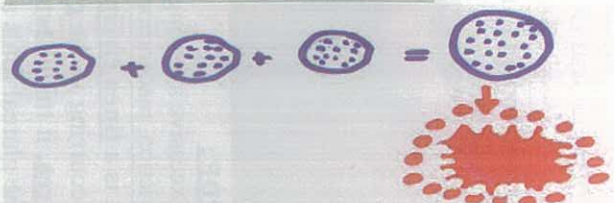
pruritus vulvae with White vaginal discharge, Creamy, Thick; commoner in pregnancy

C-Balanitis

in uncircumcised males



2- Cutaneous candidiasis:



Vesicles that coalesce and rupture giving well defined, **red** eroded areas with white fringed edge and **forerunners (Satellites)**:

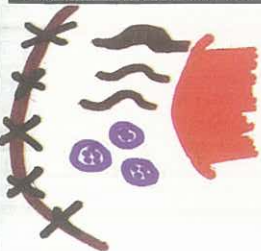
Diagnosis Of Pityriasis Versicolor

1. Clinical examination
2. Wood's light gives **yellow fluorescence.**
3. Parker ink stain shows Mycelia and Spores
(Meat balls & Spaghetti appearance)
in Skin Scrappings of Scales.



Napkin dermatitis; maceration and erythema with sharp border beyond which are satellite papules and vesicles that occur in diaper area of newborns and infants.

Depth of flexures are usually affected



(differentiates if from *dermatitis* due to contact with *napkins* where the depths of flexures are spared (*diaper rash*)



A- Paronychia And Onychia



Occupation is very important predisposing factor, e.g. housewives & cooks

Nail fold is swollen , red and slightly tender

Nail plate shows discoloration, transverse ridging and corrugation

DD: Pyogenic paronychia (the condition is chronic with **no** throbbing or pointing in **candida paronychia**)

B. Intertrigo :

- Groins , axillae and under breasts



- Erosio – interdigitalis blastomycetica;



- Maceration.
- It commonly affects the space between the Ring and Middle fingers (3rd & 4th) (narrowest Space).(In hands)
- Skin is Sodden between finger webs.
- **Angular cheilitis (perleche);**



- *streptococcal* infection and *riboflavin* deficiency may also have a role (DD)

- **Napkin dermatitis;**

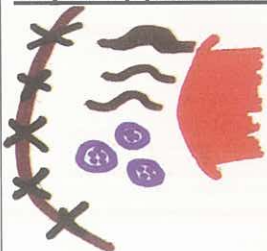
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A) PITYRIASIS VERSICOLOR = Tinea Versicolor	B) CANDIDIASIS = MONILIASIS												
TREATMENT													
I. SYSTEMIC THERAPY : KIF it is the backbone of treatment because drugs are secreted in sweat, so they can reach the fungus of contaminated areas all over the body, drugs include : a. Ketoconazole 200 mg , one tablet daily for 10 days b. Itraconazole c. Fluconazole 150 mg, capsules , 2 capsules / week for 2 – 3 weeks II. TOPICAL THERAPY : IT SS WZ 1- Imidazole derivatives, shampoo, cream , spray, or lotion . القصة 2- Tincture iodine 1-2 %; causes skin discoloration 3- Sodium hyposulphite 30 % aqueous Solution 4- Selenium sulPhide 2.5 % SusPension or ShamPoo 5- Whitfield lotion or ointment 6- Zinc Pyrithione incorporated in shamPoo III. TO PREVENT RELAPSE : 1- Selenium Sluphide shampooing once weekly 2- Ketoconazole tablets 3 days per month for 6 month	<table border="1"> <tr> <td data-bbox="805 324 1117 369">1- AVOID PDF</td><td data-bbox="1117 324 1441 369"></td></tr> <tr> <td data-bbox="805 369 1117 448">2- TOPICAL THERAPY</td><td data-bbox="1117 369 1441 448">3- SYSTEMIC THERAPY</td></tr> <tr> <td data-bbox="805 448 1117 571"><i>A- Dyes</i>; castellani paint and gentian violet 1-2 %</td><td data-bbox="1117 448 1441 571"></td></tr> <tr> <td data-bbox="805 571 1117 728"><i>B- Nystatin</i> creams, powders and vaginal tablets</td><td data-bbox="1117 571 1441 728"><i>A-Mycostatin</i> : oral suspension</td></tr> <tr> <td data-bbox="805 728 1117 896"><i>C- Imidazole</i> derivatives</td><td data-bbox="1117 728 1441 896"><i>B- Azoles</i>; ketoconazole and triazoles</td></tr> <tr> <td data-bbox="805 896 1117 1019"></td><td data-bbox="1117 896 1441 1019"><i>C- Amphotericin B</i> IV in severe cases</td></tr> </table> NB: Griseofulvin is not used in treatment, because it is not effective for treatment of yeasts	1- AVOID PDF		2- TOPICAL THERAPY	3- SYSTEMIC THERAPY	<i>A- Dyes</i> ; castellani paint and gentian violet 1-2 %		<i>B- Nystatin</i> creams, powders and vaginal tablets	<i>A-Mycostatin</i> : oral suspension	<i>C- Imidazole</i> derivatives	<i>B- Azoles</i> ; ketoconazole and triazoles		<i>C- Amphotericin B</i> IV in severe cases
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ANTIFUNGAL AGENTS:

I-TOPICAL ANTIFUNGAL	II-SYSTEMIC ANTIFUNGALS
A-Paints : • Tincture iodine 1- 2 % is effective against dermatophytes, but ineffective against candida • Gentian violet is effective against Candida, but ineffective against dermatophytes • Castellani paint is effective against both candida and dermatophytes B-Solutions : sodium hyposulphite 30 % for tinea versicolor	A.Griseofulvin : • Derived from penicillium • Dose : 12.5 mg/kg body weight given after meals in two divided doses (maximum daily dose is 6 tablets) • Duration of treatment is 3 – 6 weeks • fungistatic, effective against Dermatophytes, but not against yeasts • Tablets (125 mg) or syrup (125 mg /5ml) • Contraindication In Hepatic diseases & Pregnancy • Side effects include Hepatotoxicity , Photosensitivity and Bone marrow depression
C-Ointment: whitfield's ointment (salicylic acid 3 , benzoic acid 6 , lanoline 12 and Vaseline add to 100)	B.Allylamines : terbinafine : effective against dermatophytes only , side effects are minimal
D.Creams : Broad spectrum Antifungals : Allylamines as terbinafine Azoles as clotrimazole and miconazole NB: Terbinafine : - Cream → Broad spectrum - Systemic → only against dermatophytes	C.Azoles: Broad spectrum Against dermatophytes and yeast. ❖ Ketoconazole : • Active imidazole derivative • Given in a dosage of 200 mg daily with food for 10 days • Contraindicated in Pregnancy • Side effects include Hepatotoxicity ❖ Triazoles : • Itraconazole 200 mg/day for one week بنحط قطرة في عينا الأثنين • Fluconazole 150 mg once/week till cure; side effects are minimal

IV) PARASITIC INFECTIONS :

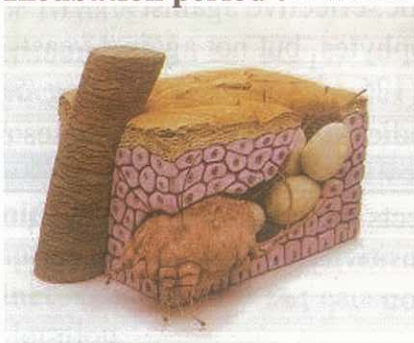
1. Scabies , types :

- Human scabies
- Animal scabies

2. Pediculosis.

❖ Human scabies :

1. **Def. :** It is a contagious disease of the skin caused by the pregnant female of the mite, *sarcoptes scabiei*
2. **Incubation period :** 2 weeks



3. **Life cycle :** fertilized female mite invades the epidermis. It digs a sloping burrow where it deposits two-three eggs/day to reach a total of 10-25 eggs. The female mite dies and eggs hatch. Nymphs come out to the surface of the skin. After maturation, copulation occurs between males and females. Pregnant females start a new cycle

4. Mode of infestation :

- Direct by close contact with human cases
- Indirect spread by clothes or bedding (less important)
- Mite cannot survive for more than few days away from skin



5. **PDF :** poor hygiene , overcrowdness and sexual promiscuity(STDs); however scabies ignores all social and economic barriers; anyone can contract scabies regardless of age , sex or race .

6. Clinical picture :

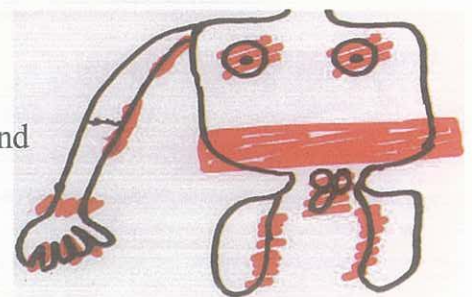
Itching is the most common manifestation; increases at night

Lesions are polymorphic; the primary lesion is the burrow

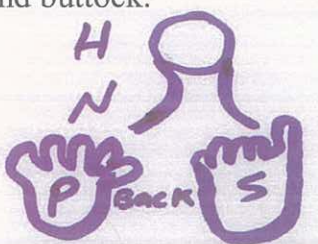
Burrow are linear elevations of the skin, 5-15 mm long.

Other lesions include : furrows, scratch marks, papules, and pustules

- They are seen in-between fingers, wrist area, medial sides of forearms, anterior axillary folds, breast in females, lower abdomen, , genitalia in males and medial aspect of thighs and buttock.



- **Head , neck , palms, soles and upper back are spared (diagnostic sign)**



7. Post-scabietic nodules:

Incidence :Rare condition

Inflammatory nodules that occur as a hypersensitivity reaction to the parasite

Itchy Indurated ,

reddish brown (hyperpigmented) in color and up to 12 mm in diameter

Persist for **Weeks** or **Months** after scabies has been treated

Treatment is by Intralesional steroids



8. Special variants of scabies :

Scabies in children and infants	Norwegian scabies	Scabies incognito
Has atypical distribution; scalp , head , neck , back , palm and soles (because <i>thin skin</i>) Secondary bacterial infection and eczematous changes occurs If we suspect scabies in an infant, we should examine the mother	Occurs in immunocompromized and mental retarded patients Presents by erythroderma (generalized erythema and scales) Itching is absent in spite of presence of millions (1-2) of mites Surrounding normal persons may suffer from ordinary scabies.	Caused by steroid application Difficult to diagnose
		

9. Complication of scabies:

- 1- Secondary INfections
- 2- INsomnia and exhaustion
- 3- Acrophobia

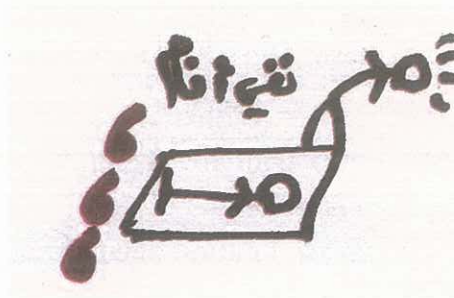
10.Diagnosis of scabies :

I-Clinical :

- 1- Nocturnal pruritus
- 2- Positive family history
- 3- Morphology and distribution of lesios
- 4- Spared sites

II-Investigations :

- 1-Mite can be extracted and examined under the microscope
- 2-Skin biopsy



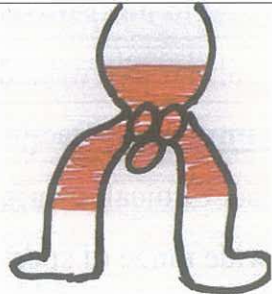
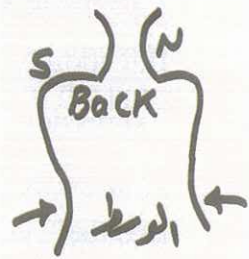
Treatment of scabies :

I- General instructions	Treatment of all family members at the same time Disinfection of clothes and beddings			
II- Topical treatment	After a hot bath , in which the skin is thoroughly scrubbed, the scabicide is applied carefully to all the skin below the neck			
• Sulphur precipitate ointment	• Crotamiton cream or lotion	• Benzyl benzoate emulsion خد بالك !	• Permethrin cream	• Gamma benzene hexachloride lotion
5 % for children < 10 years old & 10 % for adults	10 % preparation	25 % preparation	5 % preparation	1% preparation
Applied for 4 successive nights	Applied for 3 successive nights, followed by a bath on the 4 th day	Applied for 3 successive nights	Applied for 1 night, may be repeated after 1 week	Applied for 1 night and repeated after 1 week
Safe in infants	Safe in infants		Safe in infants and pregnant women	
Irritant, messy, staining and odoriferous	Weak antiscabietic , acts more as an antipruritic	Irritant	Irritant Has a high cure rate	Irritant and toxic
III) Systemic treatment:	➤ Antihistaminics alleviate itching ➤ Antihelmintics ; Ivermectin ➤ Antibiotics treat secondary infections			

❖ Animal Scabies

- Caused by **different** Species
- **Self-limiting** and of a **Short** duration due to **different** host
- Has a **Short** incubation period
- Involves **Sites** of contact with **animal**
- Transmitted from **animals** (dogs, cats and cattle) to humans, but **NOT** transmitted from human to human
- **NO** burrows; urticarial lesions may be present.



B) PEDICULOSIS : It is caused by <i>sucking lice</i>			
	Phthiriasis pubis	Pediculosis capitis	Pediculosis corporis
			
Etiology	Phthirus pubis	Pediculus humanus capitis	Pediculus humanus corporis
Epidemiology	Varies with degree of promiscuity & standards of hygiene	More in preschool and school years in low class girls	Increases with neglecting personal hygiene
Mode of infestation	Clothes or towels Sexual contact	Shared hats, brushes or combs. Close contact	Clothes or bedding
	 		
Clinical picture	Pruritus Lower abdomen , pubic area & upper thighs Nits stuck to the hair Excreta & blood give brownish spots on underwear يعصع	Pruritus Scalp Nits firmly attached to the hair by cement substance	Pruritus Neck, shoulders Back & waist areas Eggs on seams of clothes or attached to body hairs
Complications	Secondary infection Eczematization	Scalp impetigo فاكر زمان Occipital adenitis	Secondary bacterial infection
TTT	1- Phthiriasis pubis & Pediculosis corporis same as scabies 2- Pediculosis capitis : 1- Systemic Antibiotics for impetigo: 2- Antiscabietics : - Permethrin 2.5 % : Left on scalp for 10 min. and then rinsed off - Gamma benzene hexachloride 1 % overnight . TTT is used once/week for 3 weeks to destroy nymphs & prevent maturation 3- 3 % Acetic acid to dissolve the cement substance followed by combing with narrow comb to remove the nits		



V) Leprosy = Hansen's Disease / Hanseniasis

❖ Introduction :

- It is a chronic granulomatous mycobacterial **infectious** disease.
- It occurs more in tropical & Subtropical areas (India, Africa & Brazil).
- It targets mainly Skin and nerves.
- It is caused by **mycobacterium leprae** which are
 - Slightly curved Bacilli, Acid and Alcohol fast,
 - Stained by modified Ziel-Neelson stain,
 - Surface is covered by **glycolipid layer**
- Do not grow in vitro but grow in footpads of laboratory animals. حيوان الأرماديللو
- Incubation period is long ranging from 2– 12 years



❖ Pathogenesis Of Infection :

Infection occurs through nasal mucosa by droplet or through wounds.

Expression of disease depends on **cell-mediated immunity**. Bacilli enter through nasal mucosa. They are engulfed by Schwann cells. Clinical manifestations occur according to the immune status of the body in a wide range of spectrum starting at one pole by :

- Tuberculoid leprosy (TT) which reflects high immunity, then



- Borderline tuberculoid (BT), borderline leprosy (BB), borderline lepromatous (BL)



- And lastly lepromatous leprosy (LL) which reflects low immunity of the host

❖ Spectrum Of Leprosy :

TT ↔ BT ↔ BB ↔ BL ↔ LL

❖ Immune Status Of The Host:

- 1-High immunity leads to paucibacillary leprosy
- 2-Poor immunity leads to multibacillary leprosy



❖ Classification Of Leprosy :

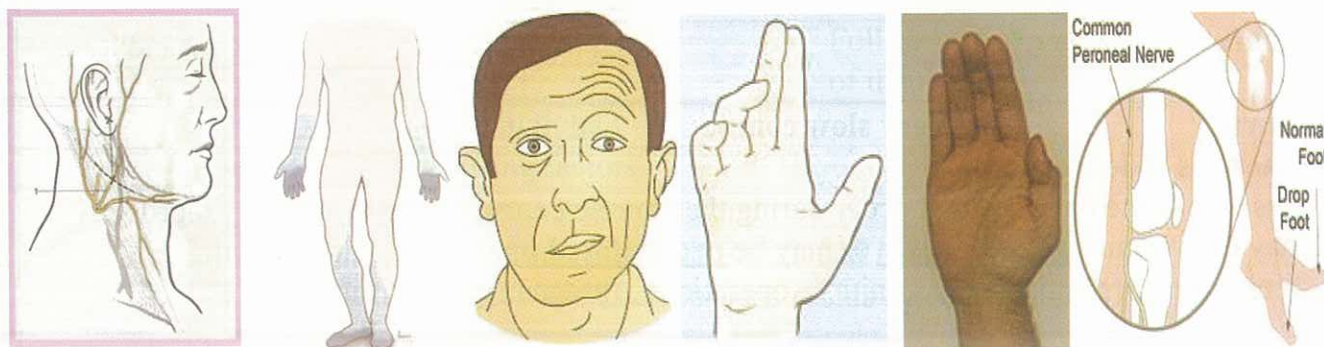
I) Bacteriological Classification	II) Clinical Classification
A. Paucibacillary leprosy : Tuberculoid leprosy (TT) Borderline tuberculoid (BT)	A) Tuberculoid leprosy
B. Multibacillary leprosy : Borderline leprosy (BB) Borderline lepromatous (BL) Lepromatous leprosy (LL)	B) Borderline leprosy : Borderline tuberculoid (BT) Borderline Leprosy (BB) Borderline lepromatous leprosy (BL) C) Lepromatous leprosy (LL)

- ❖ **Lepromin Test** : prepared from heat killed bacilli, injected intradermally.
It is non-specific, non-diagnostic. It is used for :

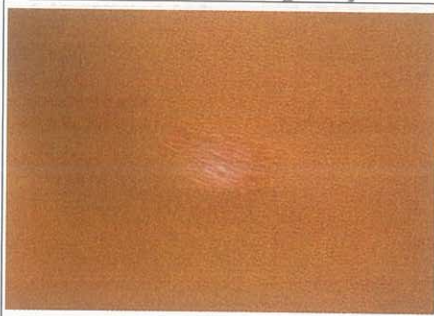
A- Classification of leprosy	B- Prognosis of leprosy
Strongly positive : suggests tuberculoid leprosy (TT)	shift of test from –ve to +ve indicates efficacy of therapy given to the patient
Weakly negative : suggests borderline tuberculoid (BT)	NB : If normal person in an endemic area is lepromin negative , he is liable to <i>contract</i> leprosy due to <i>absence</i> of cell mediated immunity.
Negative :could mean borderline leprosy (BB), borderline lepromatous leprosy (BL) or lepromatous leprosy (LL)	

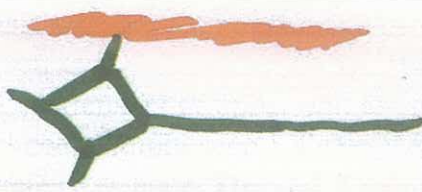
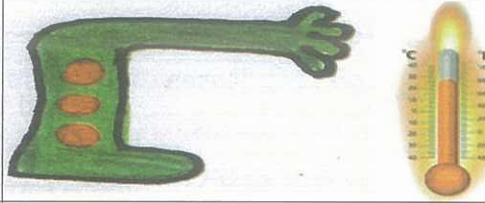
❖ Nerve Involvement In Leprosy :

- Leprosy involves superficial nerves e.g. ulnar, lateral popliteal and great auricular nerves. Involved nerves are thickened, tender & beaded
- Sensory nerves affection leads to glove and stock anesthesia with loss of pain leading to repeated injuries of hands & feet and trophic changes
- Motor nerves affection causes facial palsy (facial) , claw hand (ulnar), ape hand (median) or dropped foot (lateral popliteal)



❖ Clinical Types Of Leprosy :

	1) Tuberculoid Leprosy	2) Lepromatous Leprosy
		
Disease of	Nerves&skin	Nerves& skin& systemic involvement
Immunity	Good	No immunity
Lepromin test	Strongly Positive	Negative
Bacteriology	No or Paucibacilliary	Multibacilliary
Clinical picture	• <u>M</u>aculoanaesthetic <u>P</u>atch with hypopigmented <u>C</u>enter • Skin dry , hairless, insensitive 	 • Glistening <u>E</u>rythematous or skin-colored papules, nodules and plaques • <u>E</u>ar → thickened & nodular • Thickening of <u>E</u>ars , face & skin of forehead + nodule on nose + deepening of natural lines gives the picture of “<u>E</u>xpression: <u>L</u>eonine Facies” • <u>E</u>yebrows → alopecia of outer 1/3 • <u>E</u>dema & ulceration the legs.
Nerves	Involved early; may lead to glove and stocking anesthesia	Late anesthesia leading to loss of <u>T</u> emperature, <u>L</u> ight touch, <u>P</u> ain then <u>D</u> eep touch → trophic changes <u>تلب</u>
Mucous membranes	None	Spontaneous bleeding from nose Nodules & ulcers of nasal septum Cartilage destruction → nose deformity
Others		Larynx, bones, muscles and testes Intercurrent infections
Course	Very slow course	
Reactions in leprosy : These are acute episodes that occur during the chronic course of multibacilliary leprosy. They may occur spontaneously or may be precipitated by (infection, treatment, , vaccination) , (physical stress, injury , operation) , (pregnancy & parturition)		

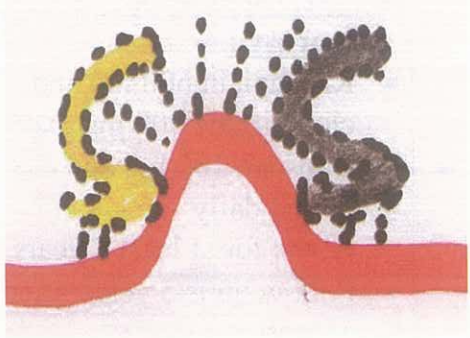
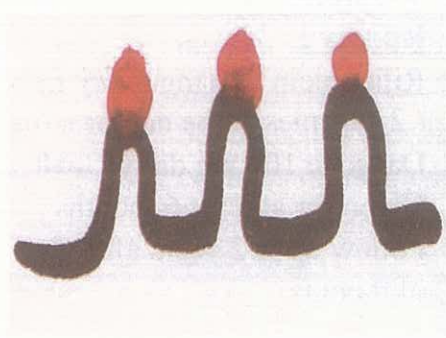
Type of reaction	Reaction Type I	Reaction Type II
		
Type of immunity	Type IV cell mediated	Type III immune complex
Skin	Acute inflammation of existing lesions	Erythema nodosum leprosum + Edema of hands & feet
Nerves	Swelling with pain & tenderness → paralysis	Mild nerve damage
Systemic disturbances	None	Fever , malaise , iritis , dactylitis , Arthritis , neuritis and myositis

3) Borderline leprosy : according to patient's immunity, could be BT, BB or BL.
Patient exhibits clinical features of either TT or LL, often with a prevalence of either one or the other

Diagnosis	Clinical picture Skin smear from ear lobes , elbows, knees and any visible lesion then stained with modified Ziel-Neelson stain Skin biopsy Nerve sheath biopsy Polymerase chain reaction (PCR)
TTT	1- GENERAL LINES : - Health care - Patient education & rehabilitation 2- CHEMOTHERAPY Multidrug therapy is administered to avoid resistance of bacilli - Rifampicin 600 mg / day is administered at first for two weeks to decrease number of Bacilli and render the Patient non-infectious Dapsone is the cheapest and most important drug(the backbone) - Clofazimine is Bacteriostatic and Anti-Inflammatory
	➤ Treatment of paucibacillary leprosy : - Rifampicin 600 mg every month (2 capsules at the doctor's office) - Dapsone 100 mg daily داب في الحب Given for at least 6 months - Follow up is 2 years after the end of therapy ➤ Treatment of multibacillary leprosy : - Rifampicin 600 mg and clofazimine 300 mg every month - Dapsone 100 mg and clofazimine 50 md daily Given for at least 2 years - Follow up is 5 years after the end of therapy
	➤ Treatment of reactions : - Avoid predisposing factors - Physical and mental rest is essential - Anti-leprosy treatment should be continued in a lower dose - Anti-Inflammatory agents as corticosteroids , clofazimine 300 mg daily and aspirin

❖ Scaly Erythematous Eruptions

1. Psoriasis
2. Pityriasis Rosea
3. Lichen planus
4. Lupus Erythematosus

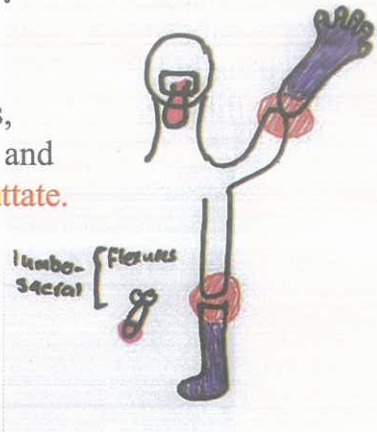
	1) PSORIASIS
	It is common non -infectious scaly erythematous skin disease. It is less severe in summer than in winter
Pathogenesis	<i>increased</i> rate of division of basal cell layer which leads to <i>increased</i> rate of epidermal بتريد turnover with <i>decrease</i> of turnover time from 28 days to 7 days
Etiology	I) Genetic predisposition  II) Provocation factors :  1. Lack of exposure to Ultraviolet rays; the disease exacerbates in winter, mainly affected covered parts and occurs in Scandinavian countries more than in tropical areas 2. Infection; hemolytic streptococcal infection may cause guttate psoriasis 3. Drugs as hypertensive , NSAIDs and anti-malarial drugs 4. Metabolic; hypocalcaemia may precipitate pustular psoriasis 5. Endocrinal, e.g. Pregnancy may precipitate psoriasis 6. Psychogenic factors 7. Trauma; the disease usually starts on pressure points as elbows, knee and sacral area; also trauma elicits disease in uninvolved skin; ❖ Koebner's Phenomenon (isomorphic response) (Plane warts, Psoriasis, Lichen Planus)
Clinical picture	   Primary lesion is a well-defined erythematous PAPULE covered by Shiny Silvery dry <i>loosely</i> attached Scales. Papules coalesce to give Plaques. Removal of the scales will lead to the appearance of bleeding spots corresponding to the tips of dermal Papillae (Auspitz sign) الأستاذ صدفة

Clinical types

D) PSORIASIS VULGARIS : most common type :

A-Skin Psoriasis :

- Bilateral Symmetrical
- Involves tongue, extensors or upper and lower limbs, nails, elbows , knees , lumbosacral, flexures& glans and
- Annular, Punctate, Circinate, Discoid, Linear or Guttate.



B-Scalp Psoriasis :

Erythematous plaques and scales



- Should be differentiated from scales of seborrheic dermatitis



Psoriatic scales	Seborrheic scales
White	Yellowish
Dry	Greasy
Shiny	Lusterless
Loosely attached	Adherent



C.Flexural Psoriasis

involves intertriginous areas e.g. axillae , groin, submammary fold and gluteal folds. Has the same clinical features , *but scaling is reduced or absent due to moisture from friction*



TREATMENT OF PSORIASIS :

- ❖ Reassurance and emotional support stressing in the **non-contagious** and benign nature of psoriasis
 - ✓ Treatment depends upon age, sex, occupation, and the type and the extent of psoriasis

I) LOCAL THERAPY : FOR MILD & MODERATE CASES = APCDs

A. Anthralin (dithranol) 0.1 – 0.5 % irritant and leaves brown staining of skin



Phototherapy

B. Phototherapy : صدفة بيضا قرعة PUVA; topical photosensitizer (Psoralen) followed by UVA Narrow band UVB in hepatic cirrhosis and extensive skin involvement.

C. Corticosteroids :

- for localized areas ointment , cream or lotion; action increases under occlusion,
- intra-lesional injection (by dermojet) for nail psoriasis

C. Calcipotriol : a vitamin D3 analogue that induces differentiation of keratinocytes and inhibits T-cell proliferation

C. Coal tar 2-5 % followed by Sun exposure should not be used on face, genitalia or flexures should not be used in pustular psoriasis

D. Laser : Dye laser or Excimer 308 nm may help in some cases

S. Salicylic acid 5 % : ointment removes scales

II) SYSTEMIC THERAPY : = APC+ M

- For extensive psoriasis vulgaris, pustular , erythrodermic or arthropathic psoriasis

A. Acitretin = retinoids:

- vitamin A derivative
- Side effects include :
 - 1- Teratogenicity (Pregnancy should be avoided during and for two years after the end of the treatment course)
 - 2- Increase Cholesterol and triglyceride level
 - 3- Dryness of skin and mucous membrane
- Dose : 0.5 – 1 mg / kg / day

P. Phototherapy :

PUVA; oral photosensitizer ; psoralen followed in 2 hrs by UVA
Given 3 times weekly till clearance followed by maintenance

C. Corticosteroids :

for generalized pustular and erythrodermic psoriasis in case of resistance to other medications
start by a high loading dose till improvement, and then taper gradually until reaching the lowest maintenance dose

C. Cyclosporine :

- Potent immunomodulatory agent used primarily for prevention of transplant rejection
- Dose is 3 mg / kg / day
- Side effects are dose-related hypertension and renal toxicity

M. Methotrexate :

- Antimitotic effect; decreases rate of division of Basal cell layer by inhibition of dihydrofolate reductase enzyme → inhibit DNA proliferation.
- Side effects are Bone marrow depression and Cytotoxic on the liver .
- Dose is 0.2 – 0.4 % mg / kg / week

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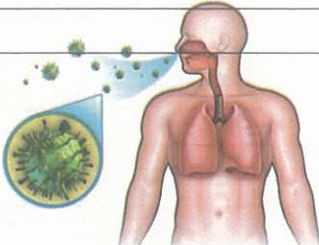
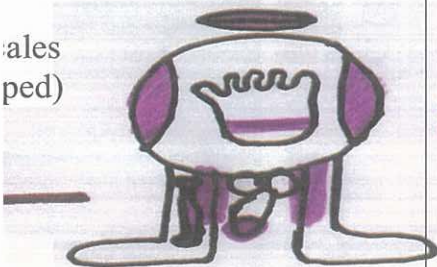
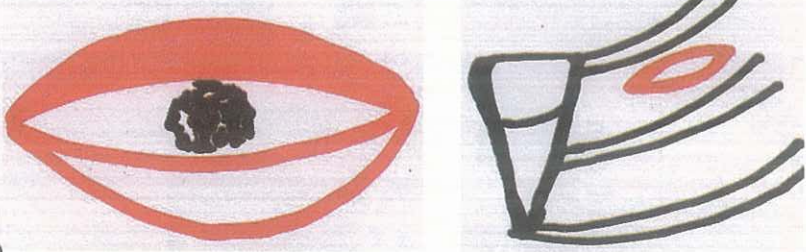
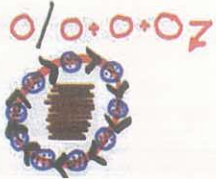
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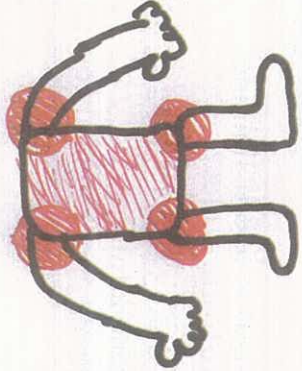
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us (LP) y erythematous disease of s of unknown etiology	Pityriasis Rosea (PR) It is inflammatory <u>non-infectious</u> scaly erythematous eruption. It represents an <u>exanthematous reaction</u> to an upper respiratory viral infection. It is highest between 15-40 years and more prevalent in <u>spring and autumn</u>
Etiology are الحزاز re preceded by stress r be associated s d NSAID	Viral etiology It is caused by <u>human herpes (HHV) - 6 and -7</u> 
ous) and Pruritic (itchy) ales ped)  Flexor surfaces especially shins of tibia & glans penis. curs in Paroxysms . patients s rather than scratching, e Pain in lesions morphic response) n Planus) aces characteristic primary then hyperPigmentation	➤ Primary lesions: Herald patch  ❖ Single oval lesion that shows three zones; An outer erythematous zone, An intermediate zone with a collarette of scales and healing center ! ... خدت بالك Inner clear zone ❖ It usually starts on one side of the trunk with its longitudinal axis <u>parallel</u> to the ribs  DD: Tinea Circinata (Tinea corporis) = ringworm of hairless skin.

T Y P E S	Lichen Planus (LP)	Pityriasis Rosea (PR)
	<u>D Ordinary LP</u>  <u>ID Actinic LP (LP tropicus) = Annular LP :</u>  - Occurs on <u>Sun</u> exposed areas; forehead, butterfly area, lower lip , V-shaped are of chest and dorsa of hands - Characterized by <u>Annular</u> lesions or classical <u>Papules</u> - Lesions exacerbate in <u>Summer</u> and remit in winter <u>IID LP of scalp = Hypertrophic LP :</u>  - Hyperkeratotic follicular papules, which lead to <u>cicatricial alopecia</u>	➤ <u>Secondary eruption:</u>    Occurs after 1-2 weeks from the onset of herald patch Lesions are similar to herald patch , but <u>smaller</u> and <u>multiple</u> . They are distributed along the long axis of ribs forming <u>Christmas tree</u> pattern of distribution. Lesions are usually located on the <u>trunk and proximal</u> parts of the limbs; <u>flannel area</u> giving the picture of <u>jacket with short sleeves</u> - Lesions are usually asymptomatic except in 30 % of cases , itching may be present - Spontaneously heal within 4-8 weeks - Recurrences are not common 1- <u>Ordinary PR.</u> 2- <u>Inverted PR:</u> occurs on distal parts of extremities 

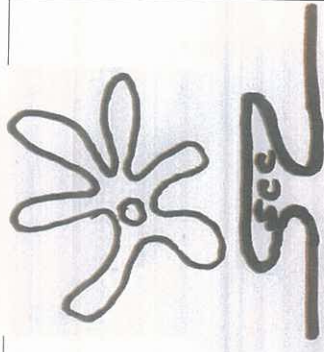
IV) Mucosal LP = Atrophic LP :



- More common in the inner sides of the cheeks
- Characterized by **reticulate white streaks** forming a network, **pinpoint papules** or **ulcerative lesions**, which are **painful** and may change into **squamous cell carcinoma** (**precancerous**)
- Lesions are **resistant** to treatment

➤ Course of LP :

- ✓ Most lesions undergo spontaneous healing in 6 months – 2 years leaving characteristic, **post-lichen hyperpigmentation**; recurrences may occur.
- ✓ Mucous membrane lesions are chronic



3- Abortive PR : only herald patch, not followed by secondary eruption



4- Papular PR : lesions are more elevated . It usually occurs in young children



5- Flexural PR : eruption is limited to flexures as axillae and groins



1- Patient reassurance that eruption is self-limiting and non-infectious.

2- Avoid skin irritation by avoiding skin rubbing or hot bath

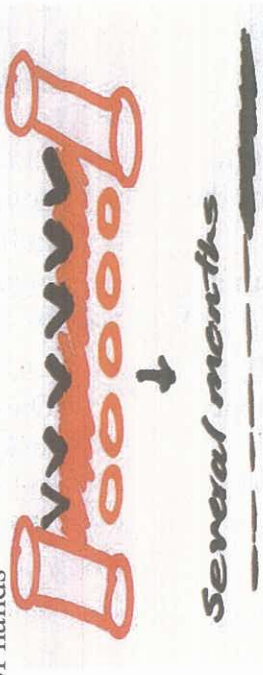
3- Soothing lotions e.g. calamine lotion

4- For itching, oral antihistamines , mild topical corticosteroids and UVB .

T **1-Avoid** the cause if possible.

T **2-For pruritus** sedative and antihistamines

3- Local therapy	4- Systemic therapy	6- Mucosal lesions	5- Actinic lesions
3 % salicylic Acid ointment	Acitretin	Acitretin	Avoid sun exposure Topical sunscreens
Steroid	Steroids	Steroids, topical, systemic & intralesional	Topical corticosteroids
	Cyclosporine	Systemic photoprotectives e.g. Chloroquine 200-400mg/day	

LUPUS ERYTHEMATOSUS (LE)	
 ❖ It is an autoimmune collagen disease. It occurs in three forms : 1. Discoid lupus erythematosus (DLE) 2. Subacute lupus erythematosus (SLE) 3. Systemic lupus erythematosus (SLE)	
Discoid lupus erythematosus It is chronic inflammatory scaly erythematous eruption confined to the skin. It occurs in the <u>third and fourth</u> decades with a female : male ratio of <u>2 : 1</u> Lesions involves <u>sun-exposed areas</u>; forehead, butterfly area of face, nose, ears, lower lip, scalp , V-shaped area of the chest and dorsa of hands  Characterized by well-defined erythematous plaques covered with <u>adherent scales</u>; lying underneath are <u>dilated pilosebaceous orifices (stippling sign)</u>. Borders of plaque show <u>telangiectasia</u> . in the course of several months , lesions flatten leaving a <u>thin atrophic scar</u>; therefore scalp lesions end up with <u>permanent cicatricial alopecia</u> 	Systemic lupus erythematosus It is a systemic disease characterized by immunological abnormalities and pathological changes . it involves a number of organs and systems, particularly skin, kidney , joints and vasculature. It occurs in early life with a female : male ratio of <u>8 : 1</u> ❖ <u>Skin manifestations of SLE :</u> Discoid lesions resembling those of DLE Alopecia, diffuse and non-cicatricial Purpura , vasculitis and ulcerations , urticaria , erythema multiform Raynaud's phenomenon Malar Rash; erythematous , non-scarring patches on light exposed areas (butterfly area of face, V-shaped are of chest & dorsa of hands)
1- Avoid sun exposure and use sun-screen creams or lotions 2- Systemic photoprotectives e.g. Chloroquine 200-400 mg/day 3- Topical corticosteroids 4- Intralesional corticosteroids 5- Systemic corticosteroids for resistant cases.	

❖ ALLERGIC DERMATOSES

1- Eczema. 2- Urticaria. 3- Drugs eruption. 4- Erythema multiforme.

I) ECZEMA (dermatitis)

Def. : It is one of the allergic diseases. It is characterized by Ill-defined **erythema**, Itching and vesicle formation at one stage.

CLINICAL TYPES



A.Acute Eczema : **erythema**, swelling, vesicles, oozing with subsequent crusting



B.Chronic Eczema : **lichenification** (thickening of skin and exaggeration of skin markings), excoriations and hyper-or hypopigmentation

C.Subacute Eczema : features of both acute and chronic forms

MAIN TYPES OF ECZEMA

I) Contact Dermatitis

A- Primary Irritant Dermatitis :



- Affects **any** individual (**not allergic**), previous contact is **non**-required for the eczema to develop
- **Dermatitis** occurs soon after exposure
- Caused by **direct damage** by strong acids and alkalis or due to **cumulative damage** by mild irritant, e.g. Frequent washing
- Susceptible individuals are compulsive washers, dishwashers, , housewives, nurses and surgeon
- Common agents are soaps, detergents, vegetables or solvents

B- Allergic Contact Dermatitis :



- Immunological reaction that develops in **genetically** susceptible individuals after exposure to the allergen
- Presentation of allergen occurs by LCS to T-cells (**type IV reaction**). On re-exposure to the same antigen, lesions develop in sensitized individuals at sites of **contact (LOCAL)**
- Common allergens are glues, nickel , chromate , cleansers, cosmetics, rubber, resins, and medications (sulfa powder, penicillin ointment and local antihistamines)

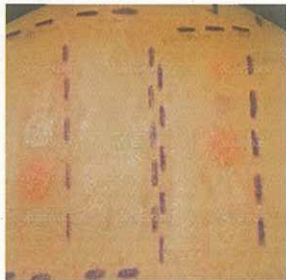
**** Photodermatitis :**

A photo – allergic reaction occurring as a result of activation of a chemical, local or systemic by light. Lesions appear on light exposed skin and presents with acute eczema



Diagnosis Of Contact Dermatitis :

- 1. History
 - 2. Clinical picture
 - 3. Histopathology
 - 4. Patch testing;
- Calculated amounts of common allergens are applied to skin of back and kept for 48 hrs. Eczema develops at site(s) of causative allergen(s)



II) Discoid Eczema :

Well-defined single or few rounded coin-shaped lesions
Involves extensor surfaces of extremities, buttocks and back.



III) Stasis Eczema

Caused by chronic venous insufficiency, which leads to rupture of small capillaries with **hemosedrin deposition** in skin and secondary dermatitis. Involves medial side of one or both lower legs above medial malleolus followed by edema, oozing, vesiculation , crusting, itching and pigmentation. Ulceration may follow.



IV)Atopic Eczema :

Atopy is a **genetic** hereditary predisposition to develop **allergic** rhinitis, **atopic** dermatitis **bronchial** asthma& hay **F**ever. **F**amily history is positive **50**-70% of patients. **(SYSTEMIC)**

Pathogenesis : triggering factors will lead to T-helper cell proliferation, excessive inflammatory cytokine production with subsequent pathological and clinical changes.

Precipitating factors : *irritants, allergens (house- dust mite), excessive washing, food, staphylococci , viruses , cold weather and lack of humidity*

V) Seborrheic Dermatitis :

It is scaly erythematous dermatitis

It is caused by **lipophilic yeast Malassezia furur المتوحشة الشريرة** ; the pathogenic (mycelial) form of **pityrosporum orbiculare** الطبية

IV) Atopic Eczema :

Phases :

A. Infantile Phase (Infantile Eczema) :



- Age is from 2 months – 2 years
- Acute eczema of cheeks and dorsa of hands or may involve whole body

B. Childhood Phase



- Age is from 4-12 years
- Groups of **itchy papules** involve the flexures particularly the antecubital and popliteal **fossae** and sides of the neck.
- Only 10 % of cases of atopic dermatitis of infancy or childhood persist to adulthood

C. Adult Phase



- Age is over 12 years
- Lesions are similar to childhood type accompanied by hyperpigmentation and lichenification

V) Seborrheic Dermatitis :

Has two distinct forms; infantile and adult

A. Infants :



- Age is from 2 weeks – 10 months
- **Greasy yellowish scales** usually on scalp, intertriginous folds (retroauricular areas, neck, groins) & diaper area
- Caused by **transfer** of androgen hormone from mother to infant ; subsides after 3 months

B. Adults :



- ❖ Affects individuals with **genetic** susceptibility due to effect of androgen on sebaceous glands
- ❖ Diffuse or localized **scaly erythematous patches** involving hairy areas and body flexures (scalp, nasolabial folds, retroauricular areas, antesternal and interscapular regions)

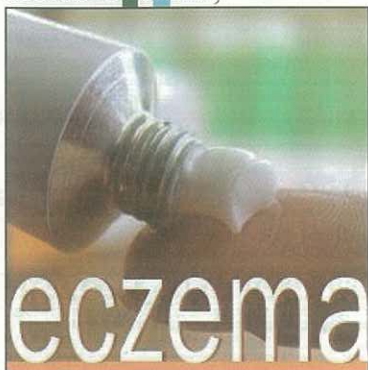
TREATMENT OF ECZEMA.

A-Avoid the causative agent

B-Acute Eczema :

I) local therapy :

- Drying antiseptic lotions (the best) as aluminum acetate, potassium permanganate 1/8000 or normal saline .
- Corticosteroids Creams;



have Hydrophilous base which does not irritate the eroded surface like ointments which have a Vaseline base

C-Chronic Eczema :

Local corticosteroids ointments because skin surface is intact



II) Systemic therapy :

Antihistamines
Corticosteroids

Systemic corticosteroids

D) Management Of Special Types :

I) Primary Irritant Dermatitis : protection e.g. by gloves, rest and lubrication.

III) Stasis Eczema : Limb elevation
Management of varicose veins

II) Atopic dermatitis :

IV) Seborrheic dermatitis زيت الإستيروود
مقشر :

- Education of patient and family avoid stress, cold, dryness, and irritants
- Frequent application of moisturizers and emollients
- Topical immunomodulators especially in children to avoid long term corticosteroid therapy
- Narrow band UVB in severe cases

- Olive oil infantile scalp lesions
- Corticosteroid creams and lotions
- Antidandruff shampoos containing selenium sulfide, zinc pyrithione or ketoconazole .

II) URTICARIA :

Def.: It is common allergic skin disease caused by **type I hypersensitivity** reaction. أنته الأول
It is characterized by the release of histamine, which leads to vasodilatation with local increase of permeability and development of transient edema of the skin; wheel. It is usually accompanied by an itchy sensation.

ETIOLOGY OF URTICARIA

1) Exogenous Causes :

A. **I**ngestants :

- **Foods** as fish, food preservatives, milk, eggs, chocolates, nuts, strawberry & banana
- **Drugs** as penicillin, salicylates, sulfonamides and NSAIDs

B. **I**njectants :

- **Drugs** e.g. Penicillin, other antibiotics and NSAIDs
- **Blood elements**
- **Insect bites** e.g. mosquitoes, fleas and ants

C. **I**nhalants : grass pollens, mould spores and perfumes

2) Endogenous Causes :

A. **P**regnancy

B. Intestinal **P**arasites : protozoal and helminthic infestations

C. Internal **M**alignancies : lymphoma or GIT cancer

D. Local **M**icrobial infections : bacterial, viral or fungal

E. **M**edical disorders : SLE, liver diseases, malaria and thyrotoxicosis

* **Autoimmune Etiology** is suspected in some cases of **chronic urticaria**. (Autoantibodies against receptors on mast cells).

PATHOGENESIS OF URTICARIA القصة المعروفة

- **On first antigen exposure**, **IgE** antibodies are formed and these bind to IgE receptors on mast cells
- **On second exposure** (after one week or more) to the same antigen or antigenically-related compound, antigen-antibody reaction occurs on the surface of mast cells. This is followed by degranulation of mast cells and release of chemical mediators (histamine, prostaglandins, heparin)

CLINICAL PICTURE OF WHEELS



Sudden appearance of **whitish** or **reddish** slightly elevated edematous lesions
Size of **wheel** varies from few **mm**s to several **cm**s
Involves any area of **mucous** membranes or skin surface
Lesions are **more** commonly generalized or localized
Lesions are **evanescent (transient)**; they last only for few hours
If lesions continue to erupt for more than **3 months**, it is called **chronic urticaria**

I) Ordinary Type : described before

II)Angioedema :



- **VD** involves large size blood vessels of the deep dermis and hypodermis leading to solid edema which persists for a few days
- It occurs in **soft tissue** as , eyelids, lips and genitals
- If involves the **larynx**, it may lead to edema of vocal cords and suffocations

III)Factitious Urticaria :



Very mild **t**rauma leads to wheal formation corresponding to site of trauma to increase in **t**riple response .

IV) Cholinergic Urticaria : مع المجهود

- **A**cetylcholine is the mediator
- **P**atient is **S**weating then he feels prickly and **i**tchy **S**ensation (due to muscular effort, nervous excitation or overheating)
- Lesions involve **S**calp, neck and upper chest more than other body areas.
- **S**mall wheals may be observed corresponding to **S**weat glands. Lesions **S**ubside usually within one hour(**S**ixty minutes)
- The **C**ondition is **S**elf-limiting within few months with **S**easonal recurrence.



V) Physical Urticarial :



Wheals appear at site of exposure to physical agents

TYPES :

Solar urticaria : on **S**un exposure parts

Pressure urticaria : after prolonged pressure

Cold urticarial on exposure to cold

Heat urticaria on exposure to heat

VI) Papular Urticaria :



- It occurs in response to **i**nsect **b**ites
- It usually affects **i**nfants and **c**hildren (up to 7 years)
- Involves **e**xposed **a**reas if due to flying insects (mosquito) or
- **c**overed **a**reas due to non-flying insects (ants and fleas)
- A **w**heal appears at the site of the bite. Within one or two days, an **i**tchy **e**rythematous **p**apule appears at the center of the wheal and stays for few days.
- Lesions occur in **g**roups or **l**ines representing the tract of the responsible insect
- Insect injects more than one antigen. This leads to **t**wo **t**ypes of **a**llergic **r**eactions; **t**ype **I** when an antigenic substance leads to **w**heal formation and **t**ype **IV** in which another antigen leads to **l**ymphocytic **c**ell **i**nfiltration and **p**apule formation.

❖ DIAGNOSIS OF URTICARIA :

1- Careful history and skin tests to determine the cause of urticarial, usually reachable in 50 % of cases

2. Body examination to detect:

- Subtype of lesion; papular urticarial, dermographism or ordinary
- Sites : on exposed parts, asymmetrical or peripherally distributed
- Associated Systemic diseases as SLE
- Degree of Severity to decide type of treatment

TREATMENT OF URTICARIA :

I) Avoid the cause if known

II) Local therapy :

- A. Cold compresses cause vasoconstriction
- B. Calamine lotion has a soothing effect
- C. Corticosteroids in localized forms as papular urticaria



• Treatment Of Papular Urticaria :

1. Control of the cause as use of insect repellents
2. Topical corticosteroids
3. Other lines of treatment of urticaria.

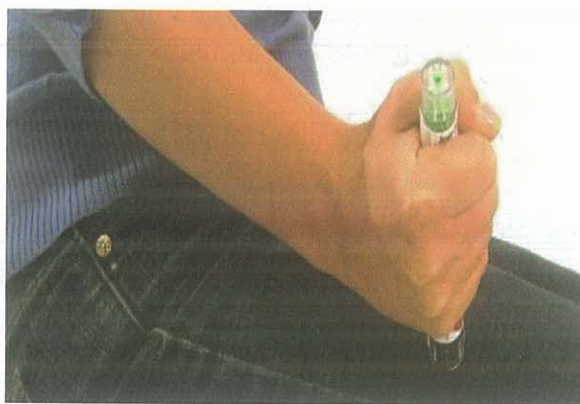
III) Systemic therapy : according to the severity, start by :

- a) Oral antihistamines (H1 antagonists);
 - Sedating as chlorpheniramine maleate and hydroxyzine (Hypnotics).
 - Non-sedating as loratidine and cetirizine
- b) Parental antihistamines , IM or IV

c) Oral corticosteroids

d) Parental corticosteroids

- e) Adrenaline, 0.2 – 0.5 ml of 1 : 1000 solution, SC or IM (never IV). It is life saving in severe cases and angioedema, contraindicated in cardiac patients.



III) Drug eruptions

Def.: Drug's Adverse effects on the skin may manifest in several form which may mimic any skin disease. It differs by having an Acute onset, Atypical distribution, more inflammation and subsidence After stoppage of the causative drug.

Common drug reactions include :

1- **Angioedema & Urticaria.**



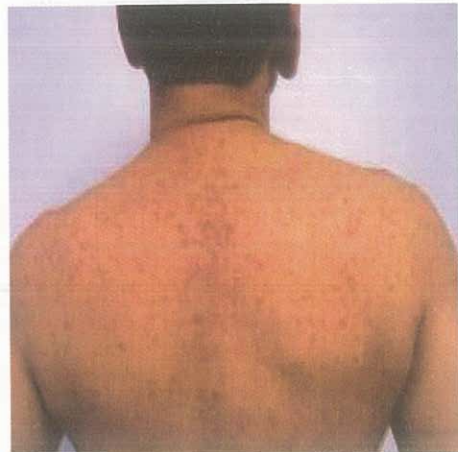
2- **Acneform Eruptions;** most commonly caused by corticosteroids



3- **Photosensitive Drug Reactions**



4- **Erythroderma (Exfoliative Dermatitis)**



5- Fixed Drug Eruption:

- Most commonly caused by sulfonamides and NSAIDs
- Called **fixed** because it is **fixed** to the drugs and **fixed** to the site
- Characterized by **permanganate – colored** macule or patch which may progress to vesicles or bullae followed by rupture and formation of an erosion
- May involve and part of the *skin or mucous membranes*, but the most common sites are the *lips and genitalia*.



IV) Erythema Multiforme (EM)

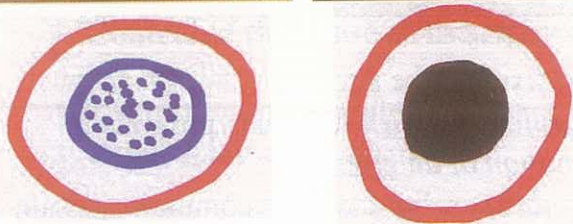
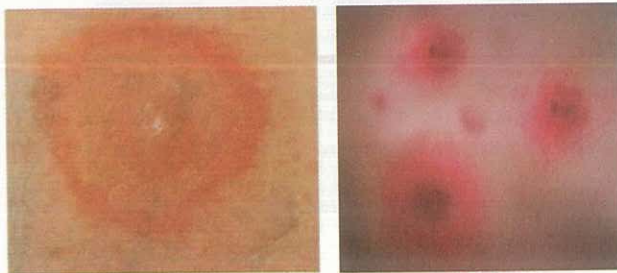
Def.: It is **hypersensitivity syndrome** affecting skin, mucous membranes and internal organs. It is characterized by multiforme eruption with a special **target (iris) lesion**. The disease is frequently caused by infection or drugs where a T-cell response is seen in the skin leading to **epidermal cell death** **بتقل وبتموت**

CAUSES

1. Genetic factors
2. **A**utoimmune diseases, SLE
3. Drugs as sulfonamides , NSAIDs, **A**nticonvulsants and **A**llopurinol
4. **I**nfections; **HSV (most common cause)**, mycoplasma pneumonia, EB virus , HBV and HIV
5. **I**nternal malignancy as carcinoma and lymphoma

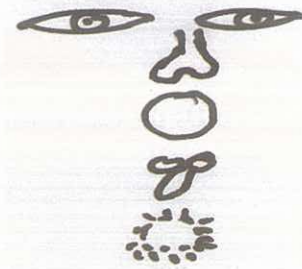
CLINICAL PICTURE

Skin lesions



Lesions are bilateral and symmetrical, commonly affecting the limbs especially dorsal surfaces of hands and feet. The most characteristic lesion is the **erythematous, annular ring with central vesicle or hyperpigmented** know as **target (iris) lesion** . other skin lesions include **erythematous macules , papules, vesicles and bullae**

Mucosal involvement



May be mild or severe affecting conjunctival , oral, nasal, genital, or anal mucosa with **PAINFUL hemorrhagic bullae and erosions**. Pain in severe cases is agonizing that it may interfere with eating and/or micturition

PATIENTS ARE CLASSIFIED INTO TWO CATEGORIES

a. EM minor :



The mild form of the disease with only limited skin affection, no or mild mucosal involvement and no systemic affection. It lasts for 1-4 weeks and could be recurrent.

b. EM major



More wide spread; severe lesions are seen with extensive mucosal involvement and may be systemic affection in the form of *pneumonia, sepsis, renal tubular necrosis and death.*

TTT

1-Avoid The Cause if possible e.g. antiviral drugs for HSV, stop offending drugs and treatment of associated systemic diseases.

2- Local Therapy

- ❖ Antibiotics for blisters and erosions
- Antiseptics and
- Anaesthetics for oral erosions
- ❖ Cold compresses
- Calamine lotion has a soothing effect
- Corticosteroids creams or ointments

3-Systemic Therapy

- a) Corticosteroids in severe cases
- b) Antibiotics to control sepsis
- c) Antihistamines

• **Treatment of EM major :**

- **Hospitalization** in severe cases
- Consult an **ophthalmologist** for ocular lesions
- **Management of any systemic complications**

Disorders of melanocytes

Vitiligo

Def.

- It is a common, **non-infectious**, genetically determined disorder characterized by **loss of melanocytes**.



Primary lesion

Primary lesion is a well circumscribed **milky white macule or patch**. It affects any part of the skin even scalp, lips, or nipples leading to whitening of hairs.

Etiology

1- Autoimmune Theory :



Antimelanocytes antibodies cause destruction of melanocytes. This theory is proved by the **association** of vitiligo with autoimmune diseases as DM, thyroid disease and pernicious anemia

Precipitating factors include psychological or mechanical trauma

2-Neurogenic Theory



Melanocytotoxic substances released from the **nerve endings** cause destruction of melanocytes

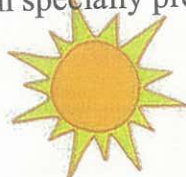
It starts at finger tips and is resistant to treatment

3- Contact Or Chemical Theory:

Melanocytotoxic substance (**Phenolic derivatives**) in gloves, slippers and film developers cause disease in specially predisposed persons



4- UV Rays :



excessive exposure to UV rays may lead to vitiligo of exposed parts in some patients

Pathogenesis

Melanocytes (melanin forming cells) are destroyed and **disappear (Absent)** from epidermis; no melanin is produced leading to appearance of **milky white macule or patch**.



Clinical Types

1. Focal vitiligo



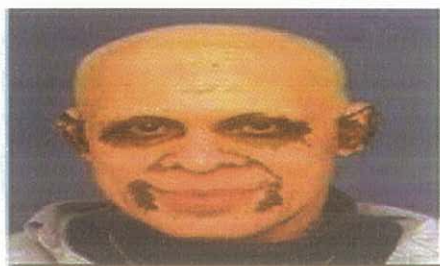
2. Unilateral vitiligo



3. Generalized vitiligo



4. Universal vitiligo



Differential diagnosis :

1. Pityriasis Alba
2. Pityriasis (Tinea) Versicolor
3. Post Inflammatory Hypopigmentation e.g. Tuberculoid Leprosy.

TTT

1-Phototherapy : صدفة بيضا قرعة

- Stimulates residual melanocytes in hair follicles for repigmentation

❖ Types:

- a. **PUVA**; oral or topical psoralen (meladenine) +ultraviolet light type A (from lamps or sun)
- b. **Narrow band UVB**; lamps without psoralen

2- Medical Treatment :

- A-Immunomodulators
- B-Steroids; topical and systemic
- C-Antioxidants

3-Surgical Treatment :

- a. **Punch grafting** from normal to diseased site

- b. **Tissue culture** of melanocytes

4-Camouflage : skin-colored material to hide affected area

- ❖ **N.B.:** In cases of universal vitiligo, residual pigmentation of normal color may be removed by **phenolic compounds**, **hydroquinone** derivatives or by **LASER**.



Disorders of sebaceous glands

Acne

It is chronic inflammatory disorder of the pilosebaceous unit. It is one of the **most frequent** chronic skin diseases and the commonest dermatological disorder in adolescents .

Lesions are polymorphic; Primary lesion is the **comedone** (*black head in the pilosebaceous orifice*). Other lesions include **papules, pustules, nodules and cysts**. (NB: NO VESICLES.)

❖ Pathophysiologic Factors :

- Hyperproliferation of **KCs** of unknown cause
- Increase in **Androgen** level which leads to increase in sebum secretion
- Change in **sebum** composition
- Microbial colonization of pilosebaceous units specially **propionobacterium acnes**

❖ Pathogenesis :



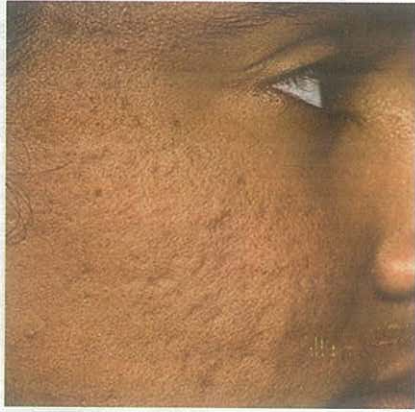
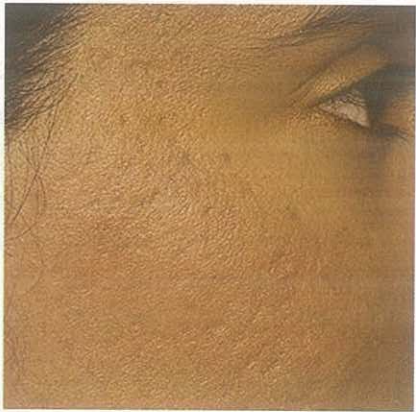
Retained KCs block the follicular opening. This leads to dilatation of the lower part of the follicle by the entrapped sebum. Disruption of follicular epithelium leads to discharge of follicular content into the dermis. The combination of keratin, sebum and microorganisms especially **propionobacterium acnes** results in inflammation and formation of **papules, pustules and nodulocystic lesions**.

- Inflammatory changes of acne may be socially disabling to some degree and may leave scars both physical and psychological.

❖ Clinical picture :

- Acne occurs at puberty
- It involves the face, shoulders, chest, and back.
- According to severity, acne is classified into :

I) Mild acne	II) Moderate Acne	III) Severe Acne
comedones with few or no papules البداية من الباب	comedones with papules and pustules أتملت صديد	nodules and cysts (acne conglobata)

TTT	
1- TOPICAL THERAPY	2- SYSTEMIC THERAPY
For mild and moderate acne	For moderate and severe acne
Antibiotics e.g. Erythromycin and clindamycin	Antibiotics e.g. Tetracycline; it has anti-inflammatory actions
Retinoids (special derivative of vitamin A) decrease keratinization of the orifice	Retinoids (special derivative of vitamin A) Regulate proliferation of epidermal components, used for nodulocystic acne
Azelaic acid 20 % has antibacterial effect	Dapsone used for severe inflammatory lesions and for nodulocystic acne
Benzoyl peroxide 2.5 – 10 % has antibacterial effect ! ... خدت بالك	Steroids used for severe inflammatory lesions
	Antiandrogens & birth control pills used in females with premenstrual exacerbation
Treatment Of Acne Scars : 1- Chemical Peeling 2- Dermabrasions 3- Laser Resurfacing 4- Dermal Filling	
  Before After	

Disorders Of Hair Follicles

Alopecia (Hair Loss)

Normal Hair Cycle

Normally, each hair follicle shows intermittent activity; hair grows to

- MAXimum length, ANAgen phase (3 years), then مرحلة النمو
- Growth Ceases, Catagen phase (3 Weeks) and then مرحلة التوقف
- The hair is Shed , Telogen phase (3 Months) to be replaced . (MST) مرحلة السقوط

At any given time , scalp shows average of :

- 85 % of hairs in anagen phase
- 5 % of hairs in catagen phase
- 10 % of hairs in telogen pahse
- Everyday, about 50 – 100 telogen hairs are shed and replaced by newly growing hairs

Types of Alopecia

A) Cicatricial Alopecia :

Hair follicles are destroyed leading to **scar formation** and permanent hair loss

Causes : IT MBC ما بلاش نتكلم في الماضي

- Fungal **I**nfections e.g. kerion and favus
- Viral **I**nfections e.g. herpes zoster
- **I**nflammatory diseases e.g. lichen planus
- Tumors e.g. basal cell carcinoma
- Mechanical trauma
- Burns
- Collagen diseases e.g. DLE



B) Non- Cicatricial Alopecia

1-Telogen Effluvium :

2-Anagen Effluvium

Commonest form of alopecia; occurs 3-4 months after stress

PATHOGENESIS

Premature transformation of hair follicles into telogen phase resulting in **Diffuse** hair loss

Selective toxicity to **A**ctive roots of **A**nagen hairs leading to loss of hairs

CAUSES

1. Postoperative, Postpartum , Post febrile
 2. Chronic nutritional deficiency and Chronic illnesses (typhoid fever)
 3. Drugs → anticoagulant, , propranolol & gold
- Prognosis : good with hair regrowth within 6 months ضعف وقتها

- Vitamin A, Retinoids, X-Rays, Mercury, cytotoxics & thallium.

Hair Loss Loss of **90 %** or more of scalp hairs (**T**elogen , **تَسْعِين**)

Loss of more than **50 %** of scalp hairs (**a**nagen **النِّصْف**)

Hair Morphology **Dysplastic** changes

Normal resting hairs

3- Androgenetic Alopecia (Familial Baldness)

Pathogenesis

Activity of **5 – reductase** is accentuated in susceptible follicles. Testosterone is converted to the more potent dihydrotestosterone. This *slows protein synthesis* in target follicles. This leads to *shortening of anagen* duration and *increase in telogen shedding*

❖ Clinical picture :



- In males, it begins by frontal and bitemporal recession, and then it involves the vertex. من قدام لورا



- Some females may be affected where the vertex from behind frontal hairline is the target area من ورا لقدام

Treatment

❖ In males

1. **Inhibitors of 5 – reductase**, e.g. finasteride 1 mg/day
2. **Topical minoxidil 2-5 %** to increase hair growth

❖ In females :

3. **Estrogens** used only in female androgenetic alopecia; they increase sex hormone binding globulins which leads to decrease of free testosterone.
4. **Antiandrogens** used only in female androgenetic alopecia

CUTANEOUS MANIFESTATION OF INTERNAL DISORDERS

I) Cutaneous Manifestation Of Liver Diseases

Indice :



Generalized yellowish discoloration of skin and mucous membrane; best observed in the sclera caused by **impaired excretion of bilirubin** due to liver cell damage which leads to increased local binding of excess bilirubin. Treatment of liver disease is mandatory.

anthomas :



Yellowish orange skin lesions due to **deposition of cholesterol and phospholipids**. Occurs due to a disturbance of lipid metabolism.

Pruritus :

Caused by **bile salts retention** leading to irritation of cutaneous sensory nerves. Treated by **Emollients**, **Exchange resins** (cholestyramine) that lower levels of bile salts in serum and tissue or **PlasmaPheresis** of bile acids.

Minimization features in male patients :

Due to **failure to inactivate circulating androgens**. Features include loss of facial hairs, gynecomastia, and the pattern of hair, testicular atrophy, and loss of libido, oligospermia.



5-Vascular changes :

- **Palmer erythema** caused by excess estrogen



- **Caput medusa**; dilated umbilical veins seen in liver diseases associated with portal hypertension, result from opening of portal systemic collateral vessels



- **Telangiectasia** caused by vasodilatation, angiogenesis and increased perfusion



- **Spider nevi** caused by excess estrogen which has an enlarging and dilating effect on spiral arterioles



6-Hyperpigmentation: caused by failure of degradation and accumulation of **ACTH and MSH**.

7- Purpura caused by **clotting defect**

II) Cutaneous Manifestations Of Renal Failure

1. **Yellowish color caused by urochrome and carotinoid deposition**
2. **Xerosis (Dry skin)**
3. **Pruritus :**
 - Most frequent symptoms
 - ❖ **Caused by**
 - **Xerosis**, atrophy of epidermal and dermal appendages,
 - **Decreased** excretion of toxic substances,
 - **Increased** parathormone and electrolyte changes
4. **Pallor caused by anemia of chronic disease**
5. **Hyperpigmentation**
6. **Ecchymoses** : due to platelet dysfunction
7. **Uraemic Frost** : superficial white deposits on the skin due to urates deposition

TREATMENT :

- 1- Treatment of renal problem including renal transplantation
- 2- Emollients
- 3- Phototherapy (UVB) and antihistamines

III) Cutaneous Manifestations Of Internal Malignancy



- 1- **Acanthosis Nigricans**; hyperpigmented, **THICKENED**, *plaques* with velvety texture
- 2- **Acanthosis Palmaris**; **THICKENING** of palms and soles

3-Jaundice

4-Xanthomas

5-Melanosis

6- Erythema Multiforme with lymphomas

7- Erythroderma

8-Chronic Urticarial with lymphomas

9- Herpes Zoster in elderly or if lesions are bilateral, recurrent or gangrenous

IV) Cutaneous Manifestations Of Diabetes

- 1- **Increased Fungal Infections**, e.g. Moniliasis, tinea **Pedis** or tinea **Cruris**
- 2- **Increased Bacterial Infections** e.g. **Boils** or **Carbuncles**

3- **Peripheral Neuropathy**

4- **Pruritus** especially **Pruritus vulvae**

5 - **Increased Skin Tags**

6- **Eruptive Xanthomas**



Pretest : MCQs in Dermatology :		
1. Keratin is present in - Hairs. - Skin. - Nails. - All of the above. - None of the above. Answer : (d)	2. Outermost structure in the skin is the - Epidermis. - Dermis. - Hypodermis. - Basement membrane. - Collagen. Answer : (a)	3. The following is a function of the skin - Defense against external pathogens. - Temperature control. - Sensations. - All of the above. - None of the above. Answer : (d)
4. Skin appendages include all of the following EXCEPT - Sebaceous glands. - Eccrine sweat glands. - Melanocytes. - Apocrine sweat glands. - Hair. Answer : (c)	5. A plaque is a - Patch of abnormal change of skin texture. - Area of depigmentation. - The primary lesion of acne vulgaris. - Localized epidermal collection of fluid. - Deroofed burrow. Answer : (a)	6. A cyst can be differentiated from a bulla by - Its size. - Its location. - Having a wall. - Its content. - None of the above. Answer : (c)
7. A nodule - Is a circumscribed solid elevation less than 0.5 cm. - Is a circumscribed solid elevation more than 0.5 cm. - Contains fluid. - Is epidermal in origin. - None of the above. Answer : (b)	8. An erosion - Is a loss of epidermis and dermis. - Heals with a scar. - Occurs after rupture of vesicles. - All of the above. - None of the above. Answer : (e)	9. A vesicle can be differentiated from a bulla by - Its size. - Its location. - Having a wall. - Its content. - Its color. Answer : (a)
10. Vulgaris means - Serious. - Common. - Easily treated. - All of the above. - None of the above. Answer : (b)	11. Cutaneous examination includes examination of - Skin. - Hair. - Nails. - Mucous membranes. - All of the above. Answer : (e)	12. The skin is considered - An endocrine organ. - A secretory organ. - A defensive organ. - An excretory organ. - All of the above. Answer : (e)
13. A burrow is the primary lesion of - Acne vulgaris. - Lupus vulgaris. - Scabies. - Urticaria. - None of the above. Answer : (c)	14. A solid elevation of the skin, less than 5 mm in diameter is - A vesicle. - A pustule. - A papule. - A nodule. - None of the above. Answer : (c)	15. Dry or greasy laminated masses of keratin are - Scales. - Crusts. - Comedones. - Papules. - Plaques. Answer : (a)
16. The immune function of the skin is mediated by - Melanocytes. - Langerhans cells. - Elastic fibres. - Paccini's corpuscles. - Keratinocytes. Answer : (b)	17. Ecthyma is - Crusted impetigo. - Ulcerative impetigo. - Circinate impetigo. - Bullous impetigo. - Non of the above. Answer : (b)	18. Bullous impetigo - Is a purely staphylococcal infection. - Is a mixed staphylococcal & streptococcal infection. - Affects newborn infants. - a + c. - b + c. Answer : (d)

19. All of the following are bacterial infections EXCEPT - Impetigo. - Erysipelas. - Furuncles. - Cellulitis. - Kerion. Answer : (e)	20. Erythrasma is to be differentiated from - Candidiasis. - Dermatophytosis. - Flexural psoriasis. - All of the above. - None of the above. Answer : (d)	21. A vesicle can be differentiated from a bulla by - Its size. - Its location. - Having a wall. - Its content. - Its color. Answer : (a)
22. Warts can be treated by all of the following EXCEPT - Laser. - Cryotherapy. - Electrocautery. - Intralesional steroids. - Autosuggestion. Answer : (d)	23. The primary lesion of molluscum contagiosum is - Macule. - Papule. - Plaque. - Vesicle. - Pustule. Answer : (b)	24. Which of the following is a sexually transmitted skin disease? - Herpes progenitalis. - Condyloma accuminata. - Molluscum contagiosum. - All of the above. - None of the above. Answer : (d)
25. Verrucae vulgaris are - Genital warts. - Plantar warts. - Common warts. - Plane warts. - Filliform warts. Answer : (c)	26. In herpes simplex - The primary lesion is a vesicle. - Neuralgia is a frequent complication. - It usually affects the mucocutaneous junction. - It may cause eczema herpeticum in atopics. - Recurrence is common. Answer : (a)	27. Laser may be used in the treatment of - Warts. - Molluscum contagiosum. - Acne scars. - All of the above. - None of the above. Answer : (d)
28. Post herpetic neuralgia occurs more common in - Children. - Elderly patients. - Diabetic patients. - Motor nerve affection. - Sensory nerve affection. Answer : (b)	29. Mucous membranes may be affected in - Papular urticaria. - Actinic lichen planus. - Scabies. - Chickenpox. - None of the above. Answer : (d)	30. Primary varicella zoster virus infection leads to - Facial palsy. - Genital herpes. - Chickenpox. - Herpes zoster. - Oral herpes. Answer : (c)
31. In herpetic whitlow the site of infection is - Face. - Mucous membrane. - Genitals. - Fingers - None of the above. Answer : (d)	32. An adult patient with unilateral grouped vesicles along distribution of a sensory nerves is suffering from - Herpes simplex. - Herpes zoster. - Chickenpox. - Warts - None of the above. Answer : (b)	33. Primary herpes progenitalis in a pregnant female is an indication for - Topical acyclovir. - Systemic acyclovir. - Normal delivery. - Caesarian section. - None of the above. Answer : (d)

Caesarian section is indicated for a pregnant female if at the time of delivery she is affected by Herpetic whitlow. Herpes progenitalis. Herpes zoster. Chicken pox. None of the above. Answer : (b)	35. Viral skin infections include all of the following EXCEPT a. Herpes simplex. b. Chicken pox. c. Warts. d. Impetigo. e. Molluscum contagiosum. Answer : (d)	36. All the following may be used in the treatment of molluscum contagiosum EXCEPT a. Electrocautery. b. Carbolic acid. c. Cryotherapy. d. Steroids. e. Laser. Answer : (d)
37. Complications of herpes simplex infection include a. Erythema multiforme. b. Eczema herpeticum. c. Corneal ulcers. d. CNS complications. e. All of the above. Answer : (e)	38. All the following may be used in the treatment of molluscum contagiosum EXCEPT a. Electrocautery. b. Carbolic acid. c. Cryotherapy. d. Steroids. e. Laser. Answer : (d)	39. In a pregnant female with venereal warts all of the following treatment modalities can be used safely EXCEPT a. Podophyllin resin. b. Laser. c. Cryotherapy. d. Electrocautery. e. None of the above. Answer : (a)
40. Herpes progenitalis is a. Caused by HSV type II. b. Linked with cancer cervix. c. Characterized by recurrent vesicles & erosions on genitalia. d. All of the above. e. None of the above. Answer : (d)	41. Tzank smear is used to diagnose a. Leprosy. b. Impetigo. c. Herpes simplex. d. Herpes zoster. e. Pediculosis. Answer : (c)	42. One attack gives solid immunity for a. Herpes simplex. b. Herpes zoster. c. Scabies. d. Impetigo. e. Molluscum contagiosum. Answer : (b)
43. Dermatophytes cause infection of a. Non-hairy skin. b. Hair. c. Nails. d. a + b. e. a + b + c. Answer : (e)	44. Kerion a. Is a boggy swelling simulating an abscess. b. Is a disease of adults only. c. Is a staph. infection of the hair follicle. d. Is associated with systemic manifestations. e. Never leads to cicatricial alopecia. Answer : (a)	45. Tinea cruris may be confused with a. Flexural psoriasis. b. Erythrasma. c. Candidal intertrigo. d. All of the above. e. None of the above. Answer : (d)
46. Topical treatment of candidiasis includes all of the following EXCEPT a. Castellani's paint. b. Gentian violet. c. Tincture iodine. d. Imidazole compounds. e. Nystatin. Answer : (c)	47. Cutaneous manifestations of candida include all of the following EXCEPT a. Intertrigo. b. Erosio interdigitalis blastomycetica. c. Favus. d. Paronychia. e. Perleche. Answer : (c)	48. Wood's light is used in the diagnosis of a. Tinea versicolor. b. Erythrasma. c. Favus. d. All of the above. e. None of the above. Answer : (d)

49. Griseofulvin may be used in the treatment of - Oral thrush. - Tinea versicolor. - Tinea corporis. - Interdigital monilia. - Non of the above. Answer : (c)	50. Scutula is the characteristic lesion of - Scaly ring worm. - Black dot ring worm. - Favus. - Kerion. - Non of the above. Answer : (c)	51. Tinea versicolor can be treated by all of the following EXCEPT - Itraconazole. - Ketoconazole. - Griseofulvin. - Fluconazole. - Selenium sulphide. Answer : (c)
52. Wood's light examination reveals a yellow color when the skin is affected by - Vitiligo. - Erythrasma. - Tinea versicolor. - Tinea circinata. - None of the above. Answer : (c)	53. Dermatophytes may affect all of the following EXCEPT - Hair. - Nails. - Hairy Skin. - Non-hairy skin. - Internal organs. Answer : (e)	54. Tinea capitis can be treated TOPICALLY ALONE by - Selenium sulphide. - Castellani's paint. - Tincture iodine. - Imidazole derivatives. - None of the above. Answer : (e)
55. Malassezia furfur - Is a dermatophyte. - Causes Tinea capitis. - Is treated by griseofulvin. - All of the above. - None of the above. Answer : (e)	56. All of the following are antifungals EXCEPT - Griseofulvin. - Ketoconazole. - Methotrexate. - Allylamines. - Triazoles. Answer : (c)	57. Scabies in adults involves the following body sites EXCEPT - Wrist. - Genitalia. - Buttocks. - Upper back. - Flexures. Answer : (d)
58. Burrow is - A localized collection of fluid. - A solid elevation of the skin less than 0.5cm in diameter. - A tunnel in the epidermis. - A derroofed furrow. - An area of depigmented skin. Answer : (c)	59. Scabies is a - Viral infection. - Bacterial infection. - Parasitic infestation. - Fungal infection. - Mycobacterial infection Answer : (c)	60. Pediculosis capitis may be treated by 3% acetic acid. - Gamma benzene hexachloride. - Permethrin. - All of the above. - None of the above. Answer : (d)
61. Post-scabietic nodules - Represent a hypersensitivity reaction to parasites. - Present commonly on the scrotum. - Cause severe itching. - All of the above. - None of the above. Answer : (d)	62. Post-scabeitic nodules - Never cause itching. - Are usually located on the back. - Are best treated by antibiotics. - All of the above. - None of the above. Answer : (e)	63. Animal scabies is characterized by all of the following EXCEPT - Short incubation period. - Absence of burrows. - Being self-limited. - Transmitted from human to human. - Urticarial lesions. Answer : (d)
64. The following may help in the diagnosis of scabies - Positive family history. - Night itching. - Distribution of lesions. - All of the above. - None of the above. Answer : (d)	65. All of the following are used in the treatment of scabies EXCEPT - Sulphur. - Permethrin. - Benzoyl peroxide. - Crotamiton. - Benzyl benzoate. Answer : (c)	66. Burrow is the primary lesion of - Acne vulgaris. - Lupus vulgaris. - Scabies. - Urticaria. - None of the above. Answer : (c)

67. A furrow is - A derroofed burrow. - A roofed burrow. - The primary lesion of scabies. - A tunnel in the dermis. - A tunnel in the SC tissue. Answer : (a)	68. Itching is the cardinal symptom in - Vitiligo. - Alopecia. - Scabies. - Leprosy. - Impetigo. Answer : (c)	69. A male with intensely pruritic nodules on the scrotum since 2 months with a past history of scabies which was treated with antiscabietic treatment is suffering from - Nodular scabies. - Animal scabies. - Phthirus pubis. - Pediculosis corporis. - None of the above. Answer : (a)
70. In lepromatous leprosy - Lesions are few in number. - Lepromin test is positive. - Anesthesia is late and extensive on cold areas. - Organisms are rarely found in skin smears. - None of the above. Answer : (c)	71. Leonine facies may occur in - Tuberculoid leprosy. - Indeterminate leprosy. - Lepromatous leprosy. - Borderline leprosy. - None of the above. Answer : (c)	72. Lepromin test is reliable in the diagnosis of - Paucibacillary leprosy. - Lepromatous leprosy. - Tuberculoid leprosy. - None of the above. - All of the above. Answer : (d)
73. In Leprosy - It is a stable disease. - Keratinocytes are the target cells for the bacilli. - Dapsone is the backbone of treatment of all types of leprosy. - Leprosy is an autoimmune disease. - Lepromin test is reliable in the diagnosis. Answer : (c)	74. In leprosy - Lepromatous, borderline lepromatous & borderline tuberculoid leprosy are paucibacillary forms of the disease. - Nerve invasion is late in tuberculoid leprosy. - Numerous patches are characteristic of tuberculoid leprosy. - All of the above is true. - None of the above is true. Answer : (e)	75. Diagnosis of leprosy includes - Skin biopsy. - Nerve biopsy. - Nasal smear. - All of the above. - None of the above. Answer : (d)
76. Leprosy is treated by - Dapsone. - Retinoids. - Methotrexate. - Tetracyclines. - All of the above. Answer : (a)	77. Lepromin test is - A diagnostic test. - A prognostic test. - A therapeutic test. - Both diagnostic and prognostic. - None of the above. Answer : (b)	78. Hansen's disease is another name for - Acne. - Alopecia. - Scabies. - Psoriasis. - Leprosy. Answer : (E)
79. Best prognosis in leprotic cases is in - Borderline leprosy. - Tuberculoid leprosy. - Lepromatous leprosy. - Borderline tuberculoid leprosy. - Borderline lepromatous leprosy. Answer : (b)	80. Pityriasis rosea - Is an infectious scaly erythematous disease. - Is a viral exanthema. - Is commonly a recurrent disease. - Usually heals in one week. - Affects mainly forearms & lower legs. Answer : (b)	81. Treatment of pityriasis rosea includes - Isolation. - Reassurance. - Cytotoxic drugs. - Intralesional steroids. - Topical antibiotic. Answer : (b)

82. The differential diagnosis of "Herald patch" on the trunk is - Tinea capitis. - Tinea corporis. - Pityriasis versicolor. - Tinea mannum. - Tinea pedis. Answer : (b)	83. Cutaneous lesions of SLE include all of the following EXCEPT - Malar erythema. - Non cicatricial alopecia. - Photosensitivity. - Discoid lesions. - Condyloma accuminata. Answer : (e)	84. All of the following are signs of DLE EXCEPT - Erythema. - Telangiectasia. - Stippling. - Scarring. - Pustulation. Answer : (e)
85. PUVA may be used in the Treatment of all of the following EXCEPT - Psoriasis. - Vitiligo. - Discoid lupus erythematosus. - Alopecia. - None of the above. Answer : (c)	86. Stippling means - Dilated capillaries. - Dilated pilosebaceous orifices. - Atrophy. - Scarring. - Pustulation. Answer : (b)	87. Stippling sign is present in - Lichen planus. - Psoriasis. - Lupus erythematosus. - Pityriasis rosea. - Vitiligo. Answer : (c)
88. Actinic lichen planus usually affects - Mucous membranes. - Genitals. - Upper back. - Face. - None of the above. Answer : (d)	89. Lichen planus actinicus usually affects - Upper back. - Genitalia. - Nails. - All of the above. - None of the above. Answer : (e)	90. All of the following are types of lichen planus EXCEPT - Actinic lichen planus. - Pustular lichen planus. - Annular lichen planus. - Atrophic lichen planus. - Hypertrophic lichen planus. Answer : (b)
91. A 25 years old female patient presenting with well-defined erythematous plaques on the face with adherent scales, telangiectasia, stippling & atrophy is suffering from - Psoriasis. - Discoid lupus erythematosus - Lichen planus. - Seborrheic dermatitis. - Non of the above. Answer : (b)	92. Lichen planus is an inflammatory pruritic disease which affects - Mucous membranes. - Skin. - Hair follicles. - All of the above. - None of the above Answer : (d)	93. Well-defined flat-topped, polyangular, violaceous, itchy papules are the primary lesions of - Vitiligo. - Lupus erythematosus. - Lichen planus. - Psoriasis. - None of the above. Answer : (c)
94. In lichen planus, squamous cell carcinoma may complicate - Ulcerative oral lesions. - Hypertrophic lesions. - Nail lesions. - Actinic lesions. - Scalp lesions Answer : (a)	95. Psoriasis may present by all of the following EXCEPT - Flexural affection. - Joint affection. - Pustular eruption. - Nail pitting. - Cicatricial alopecia. Answer : (e)	96. Psoriasis may be manifested clinically by all of the following EXCEPT - Erythroderma. - Pustular lesions. - Arthropathy. - Flexural lesions. - Bullous lesions. Answer : (e)

97. Psoriatics with extensive skin involvement & hepatic cirrhosis can be treated by - Narrow band-UVB. - Methotrexate. - Systemic steroids. - Systemic photochemotherapy (PUVA). Answer : (a)	98. The drug which inhibits dihydrofolate reductase enzyme is - Cyclosporine. - Methotrexate. 8- methoxypsoralen. - Chloroquine sulphate. - None of the above. Answer : (b)	99. Onycholysis may be seen in - Lichen planus. - Psoriasis. - Onychomycosis. - All of the above. - None of the above. Answer : (d)
100. Erythroderma may occur in - Alopecia. - Vitiligo. - Psoriasis. - All of the above. - None of the above. Answer : (c)	101. Methotrexate is - An H-1 antagonist. - A dihydrofolate reductase inhibitor. - An H-2 antagonist. - A beta adrenergic blocker. - All of the above. Answer : (b)	102. Auspitz sign can be elicited in - Psoriasis. - Lichen planus. - Discoïd LE. - Discoïd eczema. - All of the above. Answer : (a)
103. Vitiligo may be confused with - Pityriasis alba. - Leprosy. - Pityriasis versicolor. - All of the above. - None of the above. Answer : (d)	104. The main complaint in vitiligo is - Itching. - Pain. - Burning sensation. - All of the above. - None of the above. Answer : (e)	105. In vitiligo, melanocytes are - Absent. - Malformed. - Non-functioning. - Hyperactive. - Non of the above. Answer : (a)
106. Vitiligo in a patient with hepatic failure can be treated by - Topical psoralen with ultraviolet (A). - Topical steroids. - Ultraviolet (B). - All of the above. - None of the above. Answer : (d)	107. Complete absence of melanocytes will show as - Vitiligo. - Pityriasis alba. - Tinea versicolor. - Alopecia. - None of the above. Answer : (a)	108. Chronic eczema is characterized by - Itching. - Vesiculation - Lichenification. - a + b. - a + c. Answer : (e)
109. Seborrheic dermatitis may be treated by - Olive oil in infantile scalp lesions. - Topical antifungals. - Topical steroids. - Selenium sulphide. - All of the above. Answer : (e)	110. Koebner's phenomenon is positive in all of the following EXCEPT - Warts. - Psoriasis. - Lichen planus. - Eczema. - Vitiligo. Answer : (d)	111. The immunoglobulin which is usually elevated in atopics is - Ig G. - Ig M. - Ig E. - Ig D. - All of the above. Answer : (c)
112. Acute oozing skin conditions are best treated by - Powders. - Ointments. - Creams. - Drying lotions. - Emulsions. Answer : (d)	113. An infant with bilateral erythematous papulo-vesicular eruption of cheeks with elevated Ig E is suffering from - Atopic eczema. - Varicose eczema. - Dyshidrotic eczema. - Stasis eczema. - Non of the above. Answer : (a)	114. Histamine is the chief mediator of - Contact dermatitis. - Urticaria. - Atopic dermatitis. - Discoïd lupus erythematosus. - Psoriasis. Answer : (b)

115. Evanescent elevations of the skin caused by edema of the dermis are - Macules. - Papules. - Wheals. - Nodules. - Crusts. Answer : (c)	116. Mucous membrane affection may occur in all of the following EXCEPT - Varicella. - Papular urticaria. - Lichen planus. - Herpes simplex. - DLE. Answer : (e)	117. The following type of urticaria may be life threatening - Papular urticaria. - Cholinergic urticaria. - Dermographism. - Angioedema. - Non of the above. Answer : (d)
118. SC adrenaline is life saving in patients suffering from - Angioedema. - Papular urticaria. - Cholinergic urticaria. - Dermographism. - Non of the above. Answer : (a)	119. Physical urticaria includes all of the following EXCEPT - Solar urticaria. - Papular urticaria. - Pressure urticaria. - Heat urticaria. - Non of the above. Answer : (b)	120. Systemic treatment of urticaria includes - Corticosteroids. - Antihistamines. - Adrenaline. - All of the above. - Non of the above. Answer : (d)
121. The following may cause cicatricial alopecia EXCEPT - Disoid LE. - Lichen planus. - Favus. - Alopecia areata. - Kerion. Answer : (d)	122. The following may be observed in alopecia areata - Itching. - Comedones. - Vesicles. - Adherent scales. - Exclamation mark hairs. Answer : (e)	123. Alopecia areata may be treated by - Corticosteroids. - Tincture iodine. - PUVA. - Minoxidil. - All of the above. Answer : (e)
124. Scarring alopecia may be caused by - Psoriasis. - Seborrheic dermatitis. - Fever. - Lichen planus. - None of the above. Answer : (d)	125. Clinical types of alopecia areata include all EXCEPT - Patchy type. - Marginal type. - Mucocutaneous type. - Alopecia totalis. - Alopecia universalis. Answer : (c)	126. Androgenetic alopecia in males can be treated by - Estrogens. - Cyproterone acetate. - Spironolactone. - Topical minoxidil. - All of the above. Answer : (d)
127. The following disease is not contagious - Scabies. - Pediculosis capitis. - Ecchyma. - Leprosy. - Acne. Answer : (e)	128. All of the following are factors in acne pathogenesis EXCEPT - Hyperproliferation of keratinocytes. - Change in sebum composition. - Increase in the epidermal turnover. - Distension of pilosebaceous follicle. - Microbial colonization of pilosebaceous units. Answer : (c)	129. The following organism is related to acne vulgaris - Malassezia furfur. - Corynebacterium minutissimum. - Propionibacterium acne. - Streptococcus hemolyticus. - Pityrosporum ovale. Answer : (c)

130. A patient with comedones & no papules on his face has - Mild acne. - Sycosis barbae. - Bockhart impetigo. - Acne Conglobata. - Non of the above. Answer : (a)	131. Choose the wrong answer - Retinoids are special derivatives of vitamin A. - Retinoids could be used systemically or orally. - Retinoids increase keratinization of the orifice. - Systemic retinoids should not be given to females in childbearing period. - Retinoids are used in severe acne. Answer : (c)	132. In acne vulgaris, - There is loss of melanocytes. - The sebum composition is normal. - There is colonization of pilosebaceous units by Strep. acnes. - Lesions include comedones, vesicles and nodulocysts. - There is increased proliferation of keratinocytes. Answer : (e)
133. One of the following lesions is NOT seen in acne vulgaris - Papule. - Pustule. - Cyst. - Vesicle. - Nodule. Answer : (d)	134. In acne vulgaris - The lesions are monomorphic, primary lesion is a comedone. - The lesions are polymorphic, primary lesion is a cyst. - The lesions are polymorphic, primary lesion is a comedone. - The lesions are monomorphic, primary lesion is a pustule. - The lesions are comedones, papules, vesicles, pustules & cysts. Answer : (c)	135. Telogen effluvium is : - A type of cicatricial alopecia - Diffuse hair loss - alopecia totalis - alopecia universalis - ophiasis Answer : (b)



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